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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

60 Years of Service

POVERTY OF NEBRASKA COUNTIES

The third in a series of five summary tape files from the 1980 census has been released for Nebraska. Summary Tape File 3 (STF 3) contains sample data, that is, information contained on the long census form and obtained from a portion of the households in the state. The proportion of households sampled depended on the size of the governmental unit in which they were located. For counties, some townships (precincts), and communities which had fewer than 2,500 people, one of every two households received the long form. For the remainder of the state, only one out of six households received the long form. Because of the large number of lightly populated areas in the state, the overall sampling rate for Nebraska was 25 percent. As should be expected, the proportion ranged from approximately 50 percent for most of the state's less populated counties to around 16 or 17 percent for Douglas and Lancaster counties.

The information contained on STF 3 consists of more than 1,000 basic tabulations of sample population and housing data (e.g., income, poverty, education, employment, occupation, and detailed characteristics of housing units). These summaries of sample information are available on STF 3 for the state, counties, townships or precincts, places (cities or towns), census tracts or block numbering areas, and block groups. For areas that are not block numbered, enumeration districts are available.

The October 1982 issue of *Business in Nebraska* focused on one element from STF 3, median family income. This issue will focus on poverty status of families and persons in the state. Poverty levels for families and unrelated individuals[1] are based on incomes in 1979 by using a range of income cutoffs which vary by size of family, number of children, and age of the family householder or unrelated individual. Residents of institutions, members of armed forces living in barracks, college students living in dormitories, and unrelated individuals under 15 years are excluded from poverty status calculations. The poverty thresholds for 1979 are presented in Table 1.

Table 2 (pp. 2-3) presents poverty status data of families and persons in Nebraska counties for 1979 with comparisons to 1969. Poverty statistics may not be directly comparable between 1969 and 1979 because in 1969 poverty thresholds also depended on sex of household head and whether the household was a farm or nonfarm household. Since the poverty thresholds were lower for farm households than they were for nonfarm households, there is the likelihood of a relative understatement of families and persons below poverty when data from 1979 are compared to those from 1969 (especially in counties with large farm populations).

In 1979 there were 33,316 Nebraska families below the poverty level, representing 8.0 percent of the state's families. This compares favorably with the United States figure of 9.6 percent. Between 1969 and 1979, the number of Nebraska families below poverty fell both as a total and as a percentage. There were 37,868 families, or 10.1 percent of the state's families, below poverty in 1969.

The data in the second column indicate the variability of poverty rates among the state's counties. The lowest rates were found in Sarpy County where 4.2 percent of the families fell below the poverty level. Other counties with low rates were Hall, Box Butte, Lincoln, and Lancaster counties. On the other hand, 5 Nebraska counties reported levels of 20 percent or greater. The highest was Greeley with a rate of 24.3 percent, followed by Boyd, Logan, Blaine, and Thurston.

Figure 1 (p. 3) shows the relative dispersion of poverty among families throughout the state. In all, 25 counties were at or below the state average. These counties were among the state's most populous and nearly all contained a city larger than 5,000 persons. Almost all of the counties gained population during the 1970s and in most the major source of income and employment was something other than agriculture.

On the other hand, the 31 counties which recorded poverty rates of 13 percent or more exhibited (continued on page 6)

Table 1
WEIGHTED AVERAGE POVERTY THRESHOLDS
FOR 1979

Size of Family	Threshold
1 person:	
under 65 years	$ 3,774
65 years and over	3,479
2 persons:	
householder under 65 years	4,876
householder 65 years and over	4,389
3 persons	5,787
4 persons	7,412
5 persons	8,776
6 persons	9,915
7 persons	11,237
8 persons	12,484
9 or more persons	14,812

Source: U.S. Department of Commerce, Bureau of the Census, *Provisional Estimates of Social, Economic, and Housing Characteristics*, PHC80-S1-1.

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[1] An unrelated individual is typically a householder living alone or with nonrelatives only.

Table 2

POVERTY STATUS OF FAMILIES AND PERSONS IN NEBRASKA COUNTIES

	1979						1969		Percentage Change** 1969-1979	
	Number of Families	Percent of Families	Number of Persons*	Percent of All Persons*	Percent of Persons* Under 65	Percent of Persons* 65 or Over	Percent of Families	Percent of Persons*	Percent of Families	Percent of Persons*
Adams	521	6.5	2,862	9.8	8.6	16.5	8.5	12.3	-24	-20
Antelope	467	19.6	1,986	23.1	22.1	28.1	16.1	18.5	22	25
Arthur	24	15.7	83	16.2	16.0	17.1	10.9	17.0	44	-5
Banner	53	17.9	183	19.9	22.2	2.0	13.1	22.8	37	-13
Blaine	51	20.9	244	28.1	30.5	15.7	11.0	12.2	90	131
Boone	341	16.7	1,443	19.9	19.3	22.6	17.8	20.9	-6	-5
Box Butte	191	5.2	963	7.1	5.9	16.5	12.4	18.6	-58	-62
Boyd	208	21.6	777	23.8	23.8	23.6	32.4	38.9	-33	-39
Brown	209	17.0	837	19.3	17.4	28.1	18.7	22.4	-9	-14
Buffalo	565	6.6	3,509	10.9	10.3	15.5	11.4	15.9	-42	-31
Burt	294	11.7	1,355	15.7	15.7	15.9	12.8	16.7	-9	-6
Butler	257	10.3	1,140	12.5	10.5	21.2	20.7	21.6	-50	-42
Cass	334	6.0	1,441	7.2	6.3	13.6	9.7	11.6	-38	-38
Cedar	421	14.7	2,198	19.7	19.3	21.7	27.7	32.5	-47	-39
Chase	191	14.6	789	17.0	15.8	24.1	13.5	16.8	8	1
Cherry	188	9.6	906	13.6	13.9	11.8	11.8	13.8	-19	-1
Cheyenne	242	8.6	1,215	12.2	11.9	13.7	11.7	12.9	-26	-5
Clay	206	9.0	960	12.1	10.8	18.6	12.8	15.2	-30	-20
Colfax	313	11.7	1,323	13.6	12.6	17.6	13.0	15.6	-10	-13
Cuming	326	10.6	1,530	13.4	12.9	15.8	17.1	19.6	-38	-32
Custer	478	12.2	2,066	15.1	13.9	20.6	14.3	17.5	-15	-14
Dakota	311	7.1	1,576	9.6	9.2	14.0	9.5	12.0	-25	-20
Dawes	221	9.4	1,350	15.4	14.5	20.4	13.2	16.5	-29	-7
Dawson	401	6.4	1,895	8.6	7.8	13.9	10.3	12.7	-38	-32
Deuel	58	8.1	267	11.0	11.5	8.9	4.3	6.5	88	69
Dixon	304	15.9	1,338	19.0	18.4	21.8	12.9	14.7	23	29
Dodge	700	7.1	3,042	8.8	7.7	15.3	9.3	10.9	-24	-19
Douglas	7,266	7.2	38,486	9.9	9.6	12.8	6.7	9.8	7	1
Dundy	113	13.3	484	17.3	16.5	20.6	10.9	15.4	22	12
Fillmore	199	9.0	842	11.0	9.8	16.3	12.5	15.8	-28	-30
Franklin	171	13.3	680	15.9	15.0	19.1	15.6	17.6	-15	-10
Frontier	116	11.2	555	15.5	15.3	16.6	14.5	18.6	-23	-17
Furnas	239	12.9	1,102	17.7	17.2	19.1	14.1	16.6	-9	7
Gage	537	7.9	2,411	10.4	9.3	15.3	10.5	13.2	-25	-21
Garden	74	8.7	301	11.1	10.9	11.5	17.9	21.9	-51	-49
Garfield	80	12.0	413	17.6	15.4	25.2	16.5	24.1	-27	-27
Gosper	81	13.0	321	15.4	14.3	21.5	16.2	18.5	-20	-17
Grant	31	13.0	132	15.1	15.6	11.8	9.4	7.8	38	94
Greeley	210	24.3	977	29.1	29.2	28.4	19.5	25.5	25	14
Hall	583	4.6	3,151	6.8	5.7	14.8	7.9	10.7	-42	-36
Hamilton	201	7.9	947	10.5	10.0	13.9	11.4	14.3	-31	-27
Harlan	195	15.6	776	18.4	18.3	18.8	11.2	14.2	39	30
Hayes	72	17.2	269	19.8	20.4	16.3	20.1	23.0	-14	-14
Hitchcock	147	12.5	619	15.5	15.8	14.1	18.0	22.9	-31	-32
Holt	554	15.2	2,425	18.2	17.4	23.2	21.3	25.2	-29	-28
Hooker	37	13.6	177	18.4	17.9	21.2	8.4	9.2	62	100
Howard	161	8.4	744	11.1	9.9	17.6	19.1	21.8	-56	-49
Jefferson	321	11.4	1,471	15.3	14.9	16.7	15.1	18.4	-25	-17
Johnson	227	15.0	932	17.9	18.1	17.2	16.2	18.9	-7	-5
Kearney	142	7.3	624	9.3	8.6	13.7	11.0	14.1	-34	-34
Keith	205	7.7	880	9.5	8.4	17.2	8.1	9.9	-5	-4
Keya Paha	54	14.2	214	16.5	16.7	15.6	31.7	33.2	-55	-50
Kimball	144	10.7	604	12.6	12.9	10.7	10.8	12.6	-1	0
Knox	491	15.9	2,266	20.2	19.9	21.6	27.7	30.5	-43	-34
Lancaster	2,570	5.4	15,453	8.6	8.4	9.9	5.9	9.6	-8	-10
Lincoln	525	5.3	2,636	7.3	6.4	14.6	9.1	11.8	-42	-38
Logan	59	21.1	243	25.5	27.3	15.9	8.3	11.4	154	124
Loup	29	11.6	114	13.3	12.7	16.0	19.0	21.2	-39	-37
McPherson	29	15.8	117	19.7	23.2	3.8	18.1	18.9	-13	4
Madison	543	6.7	2,823	9.3	7.9	18.3	8.5	11.6	-21	-20

Table 2 (continued)

	1979						1969		Percentage Change** 1969-1979	
	Number of Families	Percent of Families	Number of Persons*	Percent of All Persons*	Percent of Persons* Under 65	Percent of Persons* 65 or Over	Percent of Families	Percent of Persons*	Percent of Families	Percent of Persons*
Merrick	226	9.1	1,015	11.5	11.2	13.3	9.9	14.6	-8	-21
Morrill	307	17.7	1,330	22.3	22.9	19.1	23.7	27.0	-25	-17
Nance	200	15.8	968	20.8	19.9	24.8	13.7	18.0	15	16
Nemaha	252	10.8	1,239	15.5	14.3	21.0	10.4	12.1	4	28
Nuckolls	154	8.0	745	11.3	8.5	24.3	14.1	19.3	-43	-41
Otoe	369	8.6	1,657	11.2	10.4	15.0	8.0	10.8	8	4
Pawnee	174	15.1	747	19.3	18.5	22.2	19.9	24.3	-24	-21
Perkins	132	12.9	581	16.2	16.4	15.1	6.4	7.0	102	131
Phelps	201	7.3	932	9.8	8.7	15.2	9.5	11.3	-23	-13
Pierce	258	11.1	1,136	13.6	12.6	19.0	20.1	23.9	-45	-43
Platte	475	6.2	2,286	8.0	6.9	16.2	8.7	11.1	-29	-28
Polk	227	12.9	869	14.1	13.6	16.4	11.6	14.4	11	-2
Red Willow	223	6.5	1,191	9.6	8.6	15.0	9.6	12.9	-32	-26
Richardson	373	11.8	1,763	16.0	14.8	20.5	14.7	20.0	-20	-20
Rock	67	10.2	327	13.9	14.3	11.9	17.6	29.7	-42	-53
Saline	312	8.7	1,479	12.0	11.4	14.5	11.2	14.3	-22	-16
Sarpy	920	4.2	4,077	4.9	4.8	7.1	5.7	6.2	-26	-21
Saunders	379	7.5	1,780	9.6	8.9	13.8	13.4	16.2	-44	-41
Scotts Bluff	894	8.5	4,445	11.8	11.2	16.1	10.9	14.2	-22	-17
Seward	315	7.8	1,475	10.3	9.5	14.9	8.9	12.7	-12	-19
Sheridan	241	11.7	992	13.5	11.9	22.1	15.0	20.7	-22	-35
Sherman	176	15.2	831	20.0	19.0	24.3	22.7	26.6	-33	-25
Sioux	59	11.0	249	13.5	13.3	14.6	22.9	25.6	-52	-47
Stanton	207	11.7	960	14.8	13.8	22.7	20.5	24.7	-43	-40
Thayer	197	8.9	831	11.3	9.9	17.0	15.3	17.9	-42	-37
Thomas	32	11.3	101	10.4	8.7	22.7	10.2	9.3	11	12
Thurston	361	20.0	1,720	24.3	24.3	24.2	20.2	27.8	-1	-13
Valley	209	13.2	971	17.6	16.5	22.3	18.3	23.2	-28	-24
Washington	270	6.4	1,185	8.0	7.3	13.3	8.4	9.7	-24	-18
Wayne	293	11.8	1,449	16.8	16.8	16.5	13.3	17.0	-11	-1
Webster	158	11.5	725	15.3	12.1	27.4	21.2	26.6	-46	-43
Wheeler	50	16.7	222	20.9	22.0	14.0	20.6	24.6	-19	-15
York	324	8.0	1,444	10.1	9.5	13.9	8.3	10.7	-4	-6
Nebraska	33,316	8.0	163,189	10.7	10.0	15.5	10.1	13.1	-21	-18
United States	5,646,520	9.6	27,525,858	12.5	12.2	14.7	10.7	13.7	-10	-9

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*Persons include only those for whom poverty status has been determined.

**The percentage changes represent changes in the rates of families or persons below poverty and not changes in the numbers of families or persons.

Source: U.S. Department of Commerce, Bureau of the Census, *General Social and Economic Characteristics,* PC(1)-C-29, and unpublished data from STF 3.

Figure 1
PERCENT OF FAMILIES BELOW POVERTY
1979

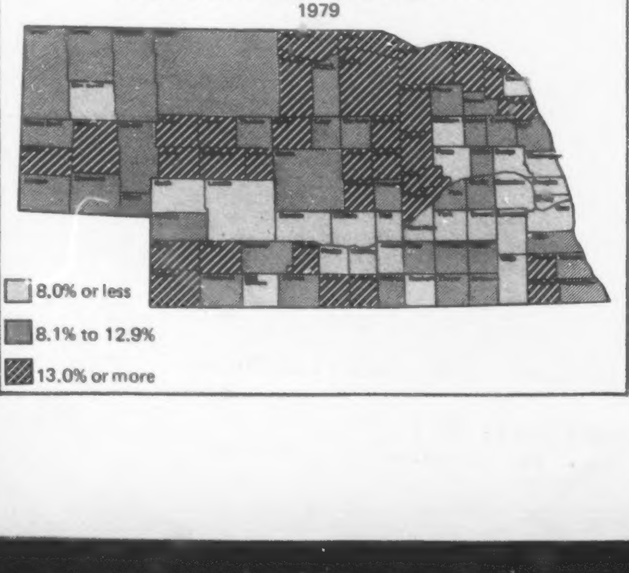
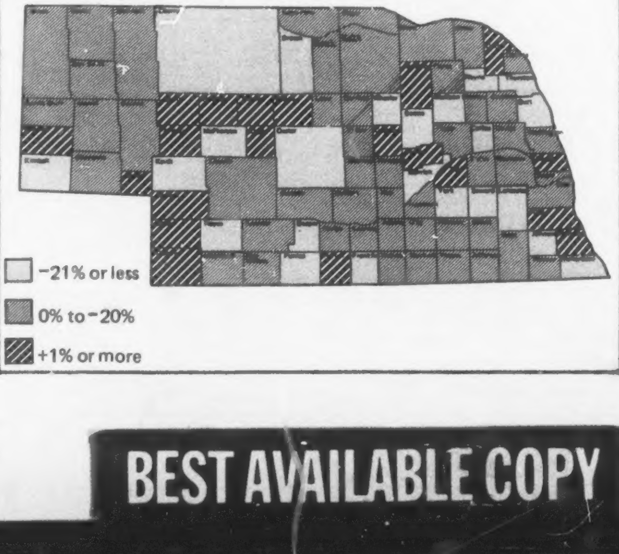


Figure 2
PERCENTAGE CHANGE OF FAMILIES BELOW POVERTY
1969-1979



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Review and Outlook

Nebraska's net physical volume index increased 1.1 percent June-July 1982. This marks the second monthly increase in the index in 5 months. Despite the monthly increase, the Nebraska economy remains approximately 2 percent below the year-previous level as measured by this index.

The gain in the index is attributable to increased cash farm marketings and gains in the construction and distributive trade sectors of the economy.

The index's agriculture component was up 3.8 percent June-July 1982. Unusually heavy marketings were responsible for the gain. Cash marketing receipts were up nearly 24 percent in July 1982 compared with the year previous. On a month-to-month basis, cash farm marketings were up nearly 13 percent. Apparently the large cash farm marketings resulted from a movement of commodities from storage to the markets.

In July, Nebraska producers were more aggressive in marketing commodities than producers in other states. Nationally, cash farm marketings were 3 percent above year-ago levels. Nebraska producers recorded a 24 percent increase in marketings in the same period.

The nonagriculture sector of the Nebraska economy recorded a 0.6 percent increase June-July 1982. Construction led with an 8.6 percent increase on a month-to-month basis. Despite the rather sharp monthly increase, construction activity remains well below year-previous levels.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

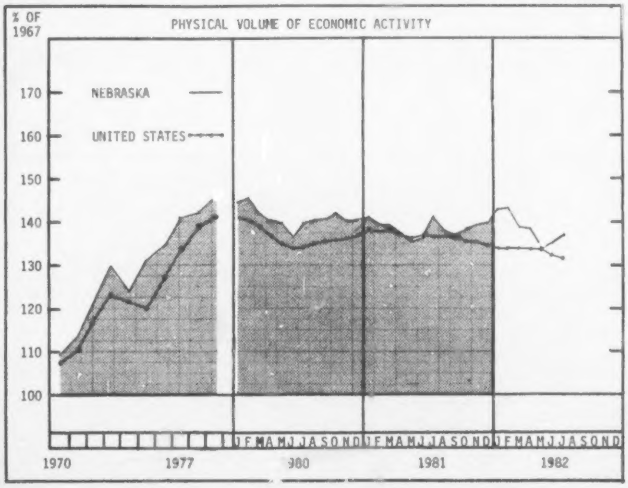
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

July 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.3	101.5	104.3	103.1
Agricultural	133.0	102.6	137.7	108.0
Nonagricultural	98.4	101.4	100.1	103.0
Construction	79.7	96.0	70.3	92.2
Manufacturing	81.3	90.4	89.9	94.6
Distributive	103.0	105.6	103.2	106.2
Government	107.4	108.0	110.1	110.0
Physical Volume	98.0	96.1	99.8	97.1
Agricultural	139.8	106.0	145.6	114.2
Nonagricultural	92.7	95.8	94.2	96.6
Construction	76.9	92.5	67.5	88.4
Manufacturing	79.9	88.3	87.8	91.8
Distributive	96.7	99.2	96.4	99.2
Government	99.5	99.3	101.5	98.3

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	379.3	363.4
Agricultural	415.9	353.7
Nonagricultural	373.5	363.7
Construction	210.0	304.3
Manufacturing	311.3	291.6
Distributive	406.4	407.1
Government	400.9	373.2
Physical Volume	137.0	132.1
Agricultural	165.0	143.2
Nonagricultural	132.7	131.8
Construction	62.5	90.6
Manufacturing	129.5	118.3
Distributive	139.1	139.3
Government	143.9	147.5

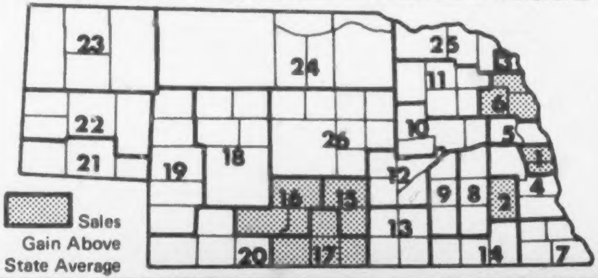


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	July 1982 as percent of July 1981	July 1982 as percent of July 1981	Year to date'82 as percent of Year to date'81
The State	93.5	94.3	94.5
1 Omaha	92.8	93.8	97.1
Bellevue	96.5		
2 Lincoln	98.9	100.2	96.0
3 So. Sioux City	83.9	85.4	89.6
4 Nebraska City	96.6	101.5	94.1
5 Fremont	90.1	93.9	93.6
Blair	96.6		
6 West Point	100.4	102.6	97.7
7 Falls City	92.1	98.0	94.8
8 Seward	96.7	100.1	94.0
9 York	100.0	95.3	94.3
10 Columbus	99.8	93.2	91.6
11 Norfolk	94.2	93.0	92.0
Wayne	82.7		
12 Grand Island	96.1	95.0	91.2
13 Hastings	82.8	85.6	89.3
14 Beatrice	94.9	97.4	93.1
Fairbury	102.4		
15 Kearney	94.1	95.9	96.2
16 Lexington	95.3	88.9	95.0
17 Holdrege	101.3	100.0	95.5
18 North Platte	93.8	92.6	90.8
19 Ogallala	97.4	90.7	89.7
20 McCook	95.3	98.5	93.6
21 Sidney	96.5	86.8	93.0
Kimball	76.8		
22 Scottsbluff/Gering	92.1	93.1	90.1
23 Alliance	88.9	88.2	88.5
Chadron	91.4		
24 O'Neill	97.6	93.6	88.4
25 Hartington	96.3	96.4	94.1
26 Broken Bow	79.1	85.9	88.7

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4) Data in Table 1 indicate that the construction index in July of 1982 was only 62.5 percent above the base average of 1967. On a year-to-date basis, this component of the Nebraska index was 67.5 percent of one year ago.

Output in the manufacturing sector as measured by the index declined 0.1 percent June-July 1982. The index has declined for 5 consecutive months and in July 1982 stood at approximately 80 percent of the previous year. This recession has impacted Nebraska manufacturing particularly severely. The physical volume index for Nebraska manufacturing is down more than for the nation. In the 1974-75 recession, Nebraska's manufacturing sector escaped the severity of the recession relatively unscathed. At the bottom of the recession, output had fallen less than 2 percent while nationally output was down approximately 13 percent.

The distributive trade sector component of the index increased 1 percent on a month-to-month basis. This sector is down approximately 3 percent from year-previous levels and, like manufacturing, distributive trade in Nebraska is being impacted somewhat more severely than nationally. The distributive trade component of the physical volume index in July 1982 was up 39 percent over the 1967 average.

The government component of the net physical volume index declined 1.2 percent June-July 1982. This component of the index is up slightly more than 1 percent on a year-to-date basis. Caution is warranted in interpreting the government component, for in Nebraska electric utility employees are classified as a part of the government sector.

Nebraska's retail sales were down 1.5 percent on a dollar volume basis in July 1982 compared with year-previous levels. Nonvehicle sales were down 2.3 percent, while motor vehicle sales were up 5.8 percent. Dollar volume motor vehicle sales were approximately $83 million in July 1982 compared with $78 million a year ago. Nonvehicle sales were approximately $704 million in July 1982 compared with $720 million one year ago.

The commodity component of the Consumer Price Index increased 4.5 percent through July 1982. When adjustments are made for price changes, retail sales fell 5.7 percent. Nonvehicle sales were down 6.5 percent on a price-adjusted basis, while motor vehicle sales were up 1.2 percent on a price-adjusted basis.

Only two Nebraska cities, Seward and Nebraska City, managed to record increases in their respective city business indexes. Construction activity was important in both communities in pushing the indexes to the top.

Data in Table 3 indicate that only three Nebraska cities managed to record increases in real retail sales. Real retail sales were up 2.4 percent in Fairbury, 1.3 percent in Holdrege, 0.4 percent in West Point, and were unchanged in York.

D. E. P.

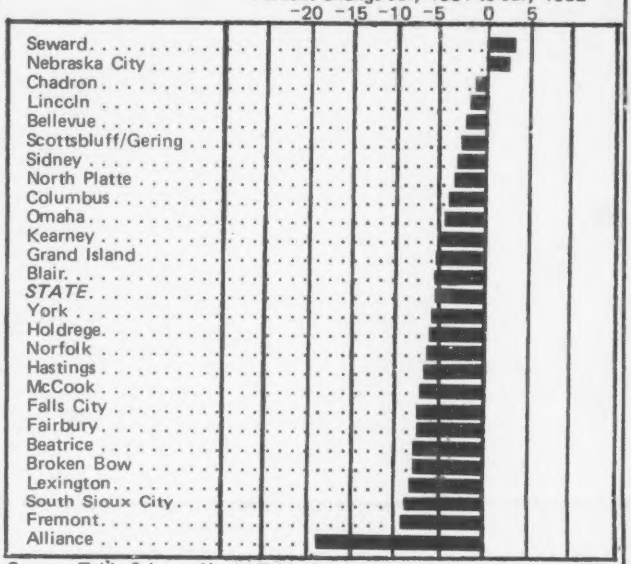
5. PRICE INDEXES

July 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	292.2	106.5	107.1
Commodity component	266.5	104.5	104.3
Wholesale Prices	300.6	101.5	103.5
Agricultural Prices			
United States	247.0	96.9	94.6
Nebraska	252.0	95.1	94.9

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change July 1981 to July 1982



Source: Table 3 (page 4) and Table 4 below.

4. JULY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	97.3	73.6	91.3
Alliance	89.3	17.5	94.0
Beatrice	97.2	42.2	85.2
Bellevue	98.7	101.4	94.5
Blair	95.3	66.7	NA
Broken Bow	99.1	150.4	95.9
Chadron	102.6	129.8	87.3
Columbus	93.4	75.3	94.3
Fairbury	96.0	24.5	97.7
Falls City	97.4	55.7	80.5
Fremont	96.0	49.4	82.9*
Grand Island	97.4	58.0	97.6
Hastings	98.1	146.8	109.6
Holdrege	95.8	36.8	91.6
Kearney	96.7	82.5	96.8
Lexington	94.2	41.8	NA
Lincoln	99.0	85.3	88.4
McCook	92.3	67.6	97.7
Nebraska City	96.0	324.9	89.5
Norfolk	94.7	77.7	85.9
North Platte	100.0	73.7	95.5
Omaha	98.7	84.4	90.4
Scottsbluff/Gering	97.7	123.7	94.3
Seward	98.1	282.6	97.4
Sidney	96.6	87.7	108.3
So. Sioux City	101.6	58.2	94.3
York	96.1	42.3	85.4

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 1)

the opposite characteristics. These counties were less populated with almost no cities larger than 2,500, they had typically lost population for several decades, and were heavily dependent on agriculture.

In 1979, 10.7 percent of Nebraska's persons[2] were below the poverty level (163,189 persons). This compared with a 12.5 percent national rate and a 13.1 percent rate for Nebraska in 1969. The poverty rates varied considerably by age, as 10.0 percent of persons under 65 were below poverty compared to 15.5 percent of the persons 65 and older. Compared to 1969, all of the decline in relative poverty mentioned earlier occurred for persons 65 and older, as their rate fell from 28.3 percent to 15.5 percent. The rates for the younger group were virtually unchanged.

At the county level, a pattern very similar to family poverty emerged. Twenty-five counties were at or below the Nebraska rate. With a rate of 4.9 percent, Sarpy was by far the lowest. Other counties with relatively low poverty levels for persons were Hall, Box Butte, Cass, and Lincoln counties. The highest levels were recorded in Greeley, Blaine, Logan, Thurston, Boyd, and Antelope counties. In Greeley, Blaine, and Logan counties, more than one-fourth of the persons were below poverty.

Table 2 also shows poverty rates in 1969 for counties. When comparing 1969 to 1979 data it should be remembered that the definitions of poverty changed between those time periods, and counties with a relatively high farm population will have a built-in upward bias on year-to-year comparisons. Year-to-year comparisons of poverty or income data also should be viewed with extreme caution because of fluctuations in agricultural income. These fluctuations make it possible for any given year's figure to be unrepresentative of the longer-term situation.

The percentage changes listed are changes in the rates of poverty and not the numbers of families or persons. This is a more valid comparison, because between the 1970 and 1980 censuses some counties lost population and some grew. The growth or decline, therefore, would have a direct effect on the size of population below poverty.

As can be seen in Figure 2 (p. 3), most of the counties in the state experienced declines in family poverty rates. Overall, 73 counties recorded decreases in their poverty levels, and 23 of those reported declines equal to or greater than the state's decline of 21 percent. Counties in which poverty rates were cut in half were Box Butte, −58 percent; Howard, −56 percent; Keya Paha, −55 percent; Sioux, −52 percent; Garden, −51 percent; and Butler, −50 percent.

There is no apparent pattern to the distribution of changes in poverty status among counties. Counties whose poverty rates increased were spread throughout the state, although there were some pockets of counties in the Sandhills and along the Colorado border. With the exception of Douglas and Nemaha counties, these counties were predominately rural with agriculture-related economies. The counties exhibiting the largest drop in poverty rates also were scattered through the state but, compared to those with increasing rates, a higher proportion of them contained a community larger than 2,500 and fewer of them were as dependent upon agriculture.

In light of the poverty statistics collected from the 1980 census, it can be concluded that Nebraska has improved relative to 1969 and relative to the nation. For both families and persons there was relatively less poverty, with the largest improvement occurring for those persons 65 and over.

J. A. D.

HOW TO OBTAIN CENSUS DATA

Under a voluntary agreement with the U.S. Bureau of the Census, the Bureau of Business Research receives copies of each publication, microfiche, and computer tape produced for Nebraska from the 1980 census. During the past two years, several issues of *Business in Nebraska* have looked at some of the census data at the state and county levels, but this is only the tip of the iceburg. There are an additional 7,000 geographic units in the state for which at least 1,450 data items are available—only a small portion of which will ever be published. Community-level census data have been used by businesses to help develop marketing strategies and determine site location and by governments to determine community profiles and identify areas of need. For more information concerning the content and cost of obtaining data products currently available from the 1980 census, contact the Bureau of Business Research at (402) 472-2334 or at Room 200 in the College of Business Administration.

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[2] This includes only those persons for whom poverty status was determined.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

60 Years of Service

THE IMPACT OF THE 1980-82 RECESSION UPON EMPLOYMENT IN NEBRASKA'S MANUFACTURING SECTOR

Economists and businessmen disagree whether the United States has had two recessions or one extended recession since 1980. Economists define a recession as two consecutive quarters of declining real output. If this definition is applied, the recession started in the fourth quarter of 1981 and was over by the second quarter of 1982.

Data in Table 1 and Figure 1 summarize quarterly changes in real Gross National Product (GNP) from 1980 through the third quarter of 1982. Output declined sharply during the second quarter of 1980, then increased for three quarters before falling in the second quarter of 1981. Technically there was no recession until the fourth quarter of 1981. Furthermore, the substantial gain recorded in the first quarter of 1981—7.9%—was sufficiently large to offset the 1980 and 1981 declines. The two recessions argument notes that the economy grew at an annual rate of near 5% for three consecutive quarters, uncommon behavior for an extended recession phase. At this point, about the most that can be said is that the economy is no longer falling sharply as it was one year ago. The recovery will probably lack vigor, but this very lack of initial strength may produce a sustained recovery.

The 1980-82 recession has more severely impacted the Nebraska economy than the 1974-75 recession. In 1974-75, Nebraska escaped the devastation inflicted by the recession upon the economy. Nebraska was fortunate because grain and livestock prices were relatively high compared with prices received in the 1960s and early 1970s. The state was also benefiting from certain spillover effects resulting from the western energy boom. While Nebraska lacks energy resources similar to those in Wyoming or Colorado, the state did benefit from the movement of materials and energy products from the Rocky Mountain Region to the east. One such benefit to Nebraska was increased employment in the transportation sector, particularly the railroad employment.

Nebraska was not nearly as fortunate in 1980-82 as it was in 1974-75. Grain and livestock prices are depressed. Recent prices for corn at $2.15 per bushel compare unfavorably with a 1974 price of more than $3.00, and, as most realize, the general price level has more than doubled since the 1974-75 recession, leaving the Nebraska farmer or rancher in an unenviable position.

Before the 1980-82 recession, the notion developed that Nebraska was largely immune to recessions or that recessions arrived in Nebraska after striking nationally. After all, the state came through the last national recession with very little impact upon its economy. The 1980-82 recession seems to be dispelling the notion that Nebraska is impervious to recessions. In fact, the 1980-82 recession has been more severely felt in Nebraska than nationally.

This article reviews and compares (continued on page 3)

Table 1
REAL GROSS NATIONAL PRODUCT
PERCENTAGE CHANGE
(Annual Rate)

1980:1	1980:2	1980:3	1980:4
+1.5	-9.6	+1.7	+4.3
1981:1	1981:2	1981:3	1981:4
+7.9	−1.5	+2.2	−5.3
1982:1	1982:2	1982:3	
−5.1	+2.1	+1.5*	

*Preliminary.

Figure 1
REAL GROSS NATIONAL PRODUCT
PERCENTAGE CHANGE
(Annual Rate)

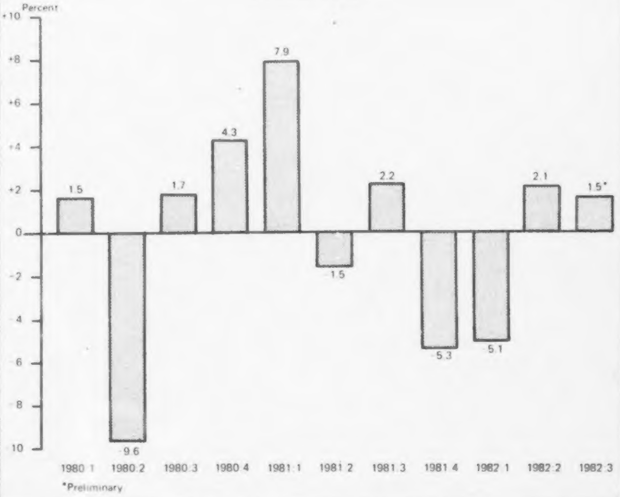


Table 2
MANUFACTURING EMPLOYMENT

Industry	Jan. '74	July '75	% Change	Jan. '80	Preliminary July '82	% Change
UNITED STATES (in millions)						
MANUFACTURING--TOTAL	20,355.0	18,007.0	-10.2	20,777.0	18,725.0	-9.9
DURABLE GOODS	12,065.0	10,425.0	-13.6	12,600.0	11,077.0	-12.1
Lumber & Wood Products	642.9	573.9	-10.7	717.4	630.8	-12.1
Furniture & Fixtures	544.4	432.7	-20.5	498.0	429.1	-13.8
Stone, Clay, & Glass Products	682.0	615.1	-9.8	678.2	589.1	-13.1
Primary Metal Industries	1,339.9	1,138.3	-15.0	1,207.2	909.1	-24.7
Fabricated Metal Products	1,500.8	1,286.2	-14.3	1,696.8	1,426.9	-15.9
Machinery, except Electrical	2,174.8	2,005.0	-7.8	2,538.5	2,262.3	-10.9
Electric & Electronic Equipment	2,068.1	1,702.0	-17.7	2,162.9	2,004.7	-7.3
Transportation Equipment	1,800.2	1,623.2	-9.8	1,975.8	1,738.6	-12.0
Instruments & Related Products	519.2	481.3	-7.3	697.7	708.3	1.5
Misc. Manufacturing Industries	437.2	395.5	-9.5	427.7	378.4	-11.5
NONDURABLE GOODS	8,290.0	7,582.0	-8.5	8,177.0	7,648.0	-6.5
Food and Kindred Products	1,677.5	1,703.4	1.5	1,659.9	1,672.9	0.8
Meat Products	334.4	339.5	1.5	357.3	341.1	-4.5
Dairy Products	202.3	202.5	0.1	175.2	172.3	-1.7
Grain Mill	142.6	138.3	-3.0	143.8	136.6	-5.0
Tobacco Manufacturers	80.1	72.0	-10.1	69.1	60.8	-12.0
Textile Mill Products	1,033.4	884.7	-14.4	884.0	727.0	-17.8
Apparel & Other Textile Products	1,359.5	1,191.4	-12.4	1,282.0	1,095.9	-14.5
Paper & Allied Products	709.0	632.9	-10.7	703.5	659.4	-6.3
Printing & Publishing	1,109.7	1,065.2	-4.0	1,266.3	1,262.4	0.3
Chemicals & Allied Products	1,043.3	1,006.8	-3.5	1,113.1	1,075.0	-3.4
Petroleum & Coal Products	190.9	204.6	7.2	208.6	209.3	-0.3
Rubber & Misc. Plastics Products	685.0	571.0	-16.6	750.3	689.8	-8.1
Leather & Leather Products	286.3	249.8	-12.7	240.3	195.7	-18.6
NEBRASKA						
MANUFACTURING--TOTAL	89,800	84,400	-6.0	100,065	83,500	-16.6
DURABLE GOODS	47,300	40,800	-13.7	52,255	42,310	-19.0
Construction Material	3,500	4,100	17.1	4,739	4,039	-14.8
Lumber & Wood Products, except Furniture	NA	NA	NA	2,119	1,393	-34.3
Stone, Clay, Glass, & Concrete Products	NA	NA	NA	2,620	2,646	1.0
Furniture & Fixtures	2,800	1,800	-35.7	1,795	1,433	-20.2
Metals	8,600	8,100	-5.8	9,609	7,600	-20.9
Primary Metal Industries	NA	NA	NA	1,941	1,447	-25.4
Fabricated Metal Products, except Mach. & Tran. Equip.	NA	NA	NA	7,668	6,153	-19.8
Machinery except Electrical	27,300	22,400	-17.9	13,618	11,004	-19.2
Farm Machinery & Equip.	NA	NA	NA	8,117	6,032	-25.7
Electric & Electronic Machinery, Equipment and Supplies	NA	NA	NA	10,999	8,312	-24.4
Transportation Equipment	NA	NA	NA	5,900	4,415	-25.2
Motor Vehicles & MV Equip.	NA	NA	NA	3,128	2,207	-29.4
Other Durable Goods (including instruments, toys & sporting goods, costume jewelry, notions, etc.)	5,100	4,400	-13.7	5,595	5,507	-1.6
NONDURABLE GOODS	42,500	43,600	2.6	47,810	41,190	-13.8
Food & Kindred Products	25,300	28,000	10.7	28,141	22,870	-18.7
Meat Products	10,800	12,900	19.4	14,027	11,240	-19.9
Dairy Products	2,700	2,500	-7.4	1,852	1,529	-17.4
Grain Mill	4,500	5,700	26.7	4,644	4,504	-3.0
Other Food Prod. (incl. canned & pres. prod., bakery, sugar & conf., bever., etc.)	7,300	6,900	-5.5	7,618	5,597	-26.5
Textile Products & Apparel	2,600	2,300	-11.5	2,351	2,000	-14.9
Printing, Pub., & Allied Indus.	7,000	6,400	-8.6	7,651	8,133	6.3
Chemicals & Allied Products	2,600	2,100	-19.2	2,522	2,812	11.5
Other Nondurable Goods (including rubber & misc. plastics, paper, & allied prod., etc.)	5,000	4,800	-4.0	7,145	5,375	-24.8

(continued from page 1)

the employment impact in manufacturing of the two recessions. The impact nationally and upon the Nebraska economy is reviewed in detail in order to determine similarities and dissimilarities.

THE IMPACT OF THE 1974-75 AND 1980-82 RECESSIONS–UNITED STATES

Total manufacturing employment declined 2 million in both recessions, from 20 million to slightly more than 18 million. For simplicity, employment changes in the 1974-75 recession are measured from January 1974 to July 1975. Although the recession started late in the fourth quarter of 1973 and ended in April of 1975, employment and unemployment lag output trends. The 1980-82 recession is more difficult to date because of the up-down changes in real output. Arbitrarily, the beginning of the current recession is dated as January 1980, the end July 1982, the last date data were available as this is written. It appears that the recession ended in the second quarter of 1982, although the upturn so far has been compared to past recovery periods. Employment information in Table 2 (p. 2) reflects the above-noted dates.

Nationally, manufacturing employment declined approximately 10% in both recessions (Table 2). Durable goods manufacturing was more severely impacted than nondurable goods, as one would expect. Durable goods employment fell 13% in the 1974-75 recession, 12% in the 1980-82 recession. More than 1.5 million jobs were lost in durable goods manufacturing in both recessions.

Nondurable goods are not as cyclical and consequently employment changes are not as volatile as in durable goods. The reason for this lack of volatility, of course, is associated with the fact that nondurable goods cannot be stored indefinitely as durable goods can, nor can consumption be postponed indefinitely as in the case of durable goods. During the 1974-75 recession 600,000 jobs were lost in nondurable goods. A similar number of jobs were lost in the 1980-82 nondurable goods sector. The decline in employment constituted a decrease of 8.5% in the 1974-75 recession, and to date the decline in nondurable goods employment constitutes a loss of 6.5%.

The most severely impacted durable goods sector in 1974-75 was the furniture and fixtures category. Employment in this sector declined 20% from January 1974 to July 1975. Also severely impacted was the electric and electronic equipment group which declined 17.7% (see Table 2). Employment in the primary metals industry declined 15% in the 1974-75 recession, while fabricated metal products declined 14.4%. All of these sectors declined more than the durable goods sector itself.

The nature of the employment decline in the 1980-82 recession is somewhat different in the durable goods sector. The largest single decline has been in the primary metals industry, where 24.7% of those working in this sector in January 1980 were unemployed in July of 1982. This decline in employment is more than twice that recorded by durable goods. The primary metals industry includes steel and iron, an industry which has been severely impacted worldwide. Other industries within the primary metals group which have been substantially impacted include aluminum and other metal products.

Fabricated metals has also suffered disproportionately more in the 1980-82 recession than other durable goods manufactures. Employment in this industry decreased nearly 16% from January of 1980 to July of 1982. The furniture and fixtures sector is down 13.8% in the second recession. Employment dropped from 498,000 in January of 1980 to approximately 429,000 in July of 1982. This is a substantial drop, but not as large as that recorded during the 1974-75 recession. Stone, clay and glass products is also down more than the durable goods average, the decrease amounting to 13.1% (see Table 2). The employment decrease in the lumber and woods product area amounted to 12.1% during the 1980-82 recession. This decrease matched that recorded by the durable goods category.

Employment in the instruments and related products sector has increased during the 1980-82 recession, bucking the trend toward declining employment levels. The increase is less than 2%, from 698,000 in January of 1980 to 708,000 in July of 1982. This sector recorded a 7.3% decrease in employment during the 1974-75 recession. Employment fell from 519,000 in January of 1974 to 481,000 in July of 1975. The instruments and related products industry was the only major category recording an increase in employment in the 1980-82 recession.

As noted above, recessions are not as devastating upon employment in the nondurable goods sector as they are upon employment in the durable goods sector. The 1980-82 recession is no exception to this generalization. Employment declined by more than one-half million in the 1980-82 recession in nondurable goods industries, the decrease amounting to 6.5%. In 1974-75 this sector lost 700,000 jobs, or a decrease of 8.5%.

Food and kindred products is usually not as severely impacted by recessions as other industries, and the 1980-82 recession is no exception. During the 1974-75 recession, the food and kindred products industry recorded a 1.5% increase in employment despite a rather nasty recession, while a 1.0% increase was recorded in 1980-82. In terms of lost output, the 1974-75 recession was more severe than the 1980-82 recession. Meat products, a subclassification of the food and kindred products category, recorded employment gains during the 1974-75 recession. Employment in dairy products and grain milling has been predominately down during the past two recessions. Dairy products managed a small, 0.1% increase in the 1974-75 recession, but recorded a decrease in employment during the 1980-82 recession. Grain milling recorded a loss of employment during both recessions.

During the 1974-75 recession, the petroleum and coal production industry was not adversely affected by the recession. Employment increased 7.2% in this industry as the nation responded to a growing energy crisis. The petroleum and coal industry recorded a small increase during the 1980-82 recession of 0.3%, much less than the gain in the 1974-75 recession.

The 1974-75 recession was particularly severe in its impact upon employment in rubber and miscellaneous plastic products. Rising petroleum prices hit this industry hard in the short run. Textile mill products was also severely impacted by the 1974-75 recession, along with leather and leather products and apparel and other textile products (see Table 2).

The 1980-82 recession also had an impact upon the textile industry. Employment decreases during the current recession were more than 150,000 jobs, or approximately 17.8% of total employment in January of 1980. Apparel and other textile products have also been severely impacted by the recession as consumers limit or postpone purchases.

Printing and publishing has escaped

(continued on page 6)

Review and Outlook

Output from Nebraska's economy declined 3.0% July-August 1982. This decline follows two smaller monthly increases. The Bureau of Business Research's net physical volume index in August 1982 was approximately 3% below year previous levels and 6% below August 1980 levels.

All sectors of the Nebraska economy declined July-August, with the exception of the government sector which recorded a small 0.6% increase. The agricultural component of the state's economy dropped 2.3%, according to the Bureau's index. Prices continued weak for Nebraska and U.S. farmers and ranchers. Nebraska agricultural prices declined 0.8%, while U.S. prices declined 1.2% on a month-to-month basis. Compared with one year ago, Nebraska agriculture prices were down 4.6%, while U.S. prices were down 3.6%.

The nonagriculture component of the Nebraska economy declined 3.2% July-August, according to the Bureau's net physical volume index. Construction recorded a 1.5% decrease on a month-to-month basis. Nebraska's construction industry has been severely impacted by high interest rates and the recession. In August 1982 the construction component of the index was approximately 20% below the year-previous level. The construction component of the index has moved up slightly from the May 1982 lows but remains well below peak levels recorded in the late 1970s.

The manufacturing component of the state's economy declined 0.4% July-August 1982.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

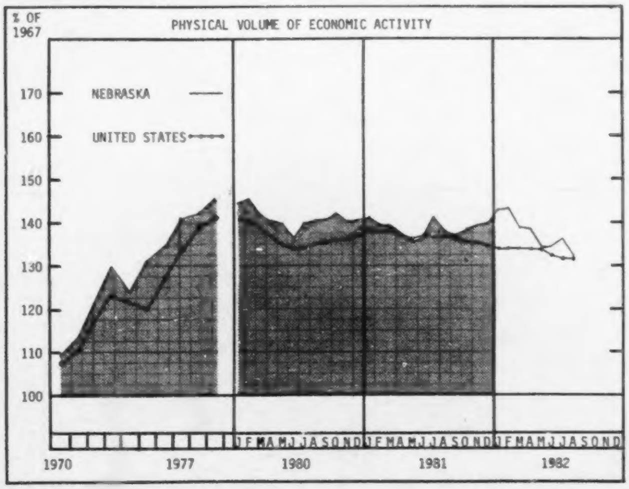
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

August 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	100.6	100.9	103.6	102.8
Agricultural	114.4	103.3	132.4	104.8
Nonagricultural	98.7	100.8	99.9	102.7
Construction	80.4	98.5	71.4	93.1
Manufacturing	83.9	89.6	89.2	94.0
Distributive	102.0	104.8	103.1	106.0
Government	109.8	107.1	110.3	109.6
Physical Volume	96.8	96.1	99.2	96.9
Agricultural	119.9	107.1	139.9	110.6
Nonagricultural	93.5	95.7	94.1	96.5
Construction	79.7	97.6	69.3	90.4
Manufacturing	82.5	88.0	87.2	91.4
Distributive	96.3	98.9	96.4	99.2
Government	102.2	98.8	101.8	98.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	365.8	363.3
Agricultural	383.9	356.4
Nonagricultural	362.9	363.6
Construction	206.2	309.3
Manufacturing	311.7	288.9
Distributive	386.6	408.4
Government	412.5	371.0
Physical Volume	132.2	132.0
Agricultural	153.6	146.1
Nonagricultural	128.9	131.5
Construction	62.7	94.0
Manufacturing	129.5	117.3
Distributive	132.0	139.5
Government	147.3	146.1

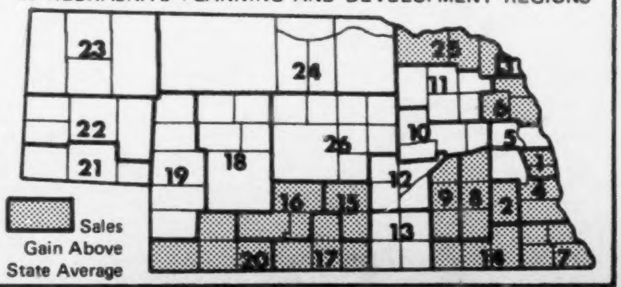


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Aug. 1982 as percent of Aug. 1981	Aug. 1982 as percent of Aug. 1981	Year to date'82 as percent of Year to date'81
The State	90.5	92.5	94.3
1 Omaha	96.5	97.8	97.2
Bellevue	95.0		
2 Lincoln	88.8	91.7	95.4
3 So. Sioux City	85.0	88.7	89.5
4 Nebraska City	102.9	97.2	94.5
5 Fremont	92.7	95.9	93.9
Blair	96.8		
6 West Point	100.1	98.8	97.9
7 Falls City	96.0	91.7	94.4
8 Seward	91.5	101.3	94.8
9 York	93.5	99.3	94.9
10 Columbus	77.4	83.9	90.5
11 Norfolk	92.5	96.3	92.5
Wayne	99.2		
12 Grand Island	91.8	91.1	91.2
13 Hastings	82 2	86.6	89.0
14 Beatrice	100.9	103.9	94.4
Fairbury	122.3		
15 Kearney	93.6	95.8	96.1
16 Lexington	101.8	98.1	95.4
17 Holdrege	80.6	93.3	95.2
18 North Platte	102.8	102.6	92.3
19 Ogallala	94.2	94.1	90.3
20 McCook	100.6	104.4	95.0
21 Sidney	89.0	87.3	92.2
Kimball	78.9		
22 Scottsbluff/Gering	87.0	90.3	90.1
23 Alliance	79.5	86.8	88.3
Chadron	77.6		
24 O'Neill	97.1	95.5	89.3
25 Hartington	95.9	96.8	94.4
26 Broken Bow	83.6	94.1	89.3

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4)

The deterioration in Nebraska's manufacturing industry has been substantial and sudden. The decline was persistent but gradual from September 1981 through April 1982, but a sharp contraction in Nebraska's manufacturing economy developed in the second quarter of 1982. In August 1982 the manufacturing component of the Bureau's net physical volume index stood at 129.5 (1967=100), compared with a reading of 157.0 in August of 1981 and 159.6 in August of 1980. The index was as high as 164.9 during the third quarter of 1981.

Retail sales recorded a 3.8% dollar volume decrease in August compared with one year ago. Total retail sales were $782 million compared with $813 million one year ago.

The commodity component of the consumer price index increased 4.0% over the interval August 1981-August 1982. When the unadjusted retail sales are corrected for price changes, retail sales declined 7.5%.

Motor vehicle sales recorded an increase in August over year-previous levels. On a dollar volume basis, motor vehicle sales were $84 million in 1982 compared with $72 million one year before. This is the fifth consecutive monthly increase in motor vehicle sales. When adjusted for price changes, motor vehicle sales were up 13.6%.

Nonvehicle retail sales declined 5.9% in August on a year-to-year basis. Sales totaled $697 million in August of 1982, down from $741 million one year previous. When adjusted for price changes, nonvehicle real retail sales were off 9.5%. This is the fourth consecutive monthly decrease in nonvehicle retail sales.

Data in Table 3 provide an indication of retail sales in Nebraska's larger trade centers. Sales are expressed monthly as a percent of the same month one year ago. Adjustments have been made for price changes.

Cities with increases in retail sales above year-previous levels include: Nebraska City, where retail sales were up 2.9%; North Platte, up 2.8%; Lexington, up 1.8%; Beatrice up 0.9%; McCook, up 0.6%; and West Point, up 0.1%. Omaha did somewhat better than the state although real retail sales were down while Lincoln did not equal the state average. Retail sales in Lincoln were down nearly 12% on a price-adjusted basis, while for the state, sales were down approximately 10%.

City business indexes reflect the strength in retail sales. Nebraska City had the largest increase, up 8.6%. Fairbury, North Platte, and Seward all had positive increases in their respective city business indexes.

D. E. P.

5. PRICE INDEXES

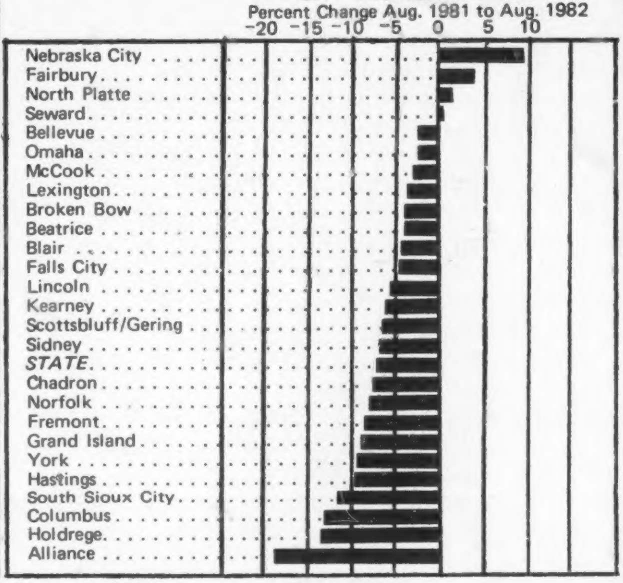
August 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	292.8	105.9	106.9
Commodity component	266.4	104.0	104.2
Wholesale Prices	300.4	101.3	103.2
Agricultural Prices			
United States	244.0	96.4	94.8
Nebraska	250.0	95.4	95.0

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change Aug. 1981 to Aug. 1982



Source: Table 3 (page 4) and Table 4 below.

4. AUGUST CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago Employment[1]	 Building Activity[2]	 Power Consumption[3]
The State	97.0	81.0	98.2
Alliance	90.9	31.8	97.5
Beatrice	97.6	43.9	99.8
Bellevue	98.1	103.8	70.2
Blair	97.1	65.3	100.4
Broken Bow	103.5	127.7	100.6
Chadron	103.1	132.9	126.2
Columbus	92.4	89.8	110.9
Fairbury	98.0	32.6	99.1
Falls City	100.8	48.5	99.3
Fremont	95.0	60.9	91.3*
Grand Island	94.8	57.8	97.0
Hastings	96.7	93.7	115.5
Holdrege	96.3	44.8	106.6
Kearney	96.5	74.1	99.3
Lexington	94.5	63.5	84.7
Lincoln	97.3	118.9	97.0
McCook	92.1	98.8	111.3
Nebraska City	97.3	577.7	100.5
Norfolk	94.0	70.6	86.1
North Platte	100.4	91.7	106.9
Omaha	98.1	90.0	100.6
Scottsbluff/Gering	97.9	117.0	96.4
Seward	100.8	223.7	103.4
Sidney	99.0	82.5	98.8
So. Sioux City	99.2	35.7	101.5
York	97.6	31.2	96.6

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

the ravages of the 1980-82 recession. The decline in employment in this industry is less than 4,000, a scant 0.3% of total employment in January 1980. The 1974-75 recession had a relatively mild impact upon this industry, with employment declining 4%. Chemicals and allied products also fared reasonably well compared with other nondurable goods industries.

THE IMPACT OF THE 1974-75 AND 1980-82 RECESSIONS UPON EMPLOYMENT—NEBRASKA

The 1980-82 recession has had a more devastating impact upon employment in Nebraska's manufacturing sector than the 1974-75 recession. Employment declined by more than 16,000 or 16.6% in the current recession, compared with an employment decrease of 5,000 or 6% in the 1974-75 recession.

Durable goods employment was more severely impacted than nondurable goods in both recessions. During the 1974-75 recession Nebraska lost approximately 7,000 jobs in durable goods, or 13.7% of employment at the outset of the recession. Approximately 10,000 jobs or 19% have been lost during the 1980-82 recession in durable goods manufacturing.

Following national trends, the most severely impacted Nebraska durable goods sector during the 1974-75 recession was furniture and fixtures, where employment declined by more than one-third. In the current recession, employment is off 20%, somewhat more than the decrease in durable goods employment.

The machinery sector of Nebraska's manufacturing base has been hard hit by both recessions. The decrease in the 1980-82 recession is more severe than in the 1974-75 recession. Farm machinery and equipment has been particularly hard hit during the 1980-82 recession, with a decrease in employment of more than 25% being recorded from January of 1980 to July of 1982.

It should be noted that information is not available in all categories at the state level to compare the impact of the 1980-82 recession with the 1974-75 recession. In many cases, information of sufficient detail was simply not available in the earlier period.

A review of the data in Table 2 indicates the severity of the 1980-82 recession. In almost all cases, durable goods employment has been more severely impacted by the current recession than by mid-1970's recession. Nebraska lost 19% of its durable goods jobs in the 1980-82 recession. Some sectors have recorded employment losses of up to one-third (lumber and wood products), while declines of one-quarter are not uncommon. It remains to be seen whether any long term impact of the current recession upon employment in durable goods will be felt by the state.

Nondurable goods employment is also being adversely impacted by the 1980-82 recession. Employment in this sector is down more than 6,000 jobs, or 13%. During the 1974-75 recession, employment in nondurable goods manufacturing in Nebraska actually increased 2.6%, or more than 1,000 jobs. The contrast between the two recessions is striking.

Food and kindred products and, in particular, meat products led the employment gain during the 1974-75 recession. Food and kindred products recorded an increase of 10.7%, while meat products recorded an increase of 19.4% during the 1974-75 recession. Employment gains were in line with national trends but were disproportionately more favorable in Nebraska during the earlier recession.

Employment decreases have been recorded in the food and kindred products and meat products area during the 1980-82 recession. Food and kindred products recorded an overall decline of nearly 19%, while employment in meat products declined nearly 20%. Dairy products and grain milling also recorded employment losses during the 1980-82 recession. While employment losses nationally are common during the 1980-82 recession for food and related products industries, the loss of jobs is disproportionately greater in Nebraska than in the nation. Just as Nebraska disproportionately gained jobs in the food and related products industries during the 1974-75 recession, Nebraska is now losing jobs more rapidly in this same important industry.

Other nondurable industries have also lost jobs during the 1980-82 recession (Table 2). The printing and publishing industry, however, stands out as an area bucking the trend toward less and less jobs. Employment in this industry is up more than 500 jobs during the 1980-82 recession. The increase amounts to 6.3% of the January 1980 employment base. The chemical and allied products industry in Nebraska also recorded an employment gain during the 1980-82 recession. Unfortunately, these two industries constitute only about 10% of Nebraska's total manufacturing employment.

D. E. P.

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Business in Nebraska

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60 Years of Service

CHANGES IN NEBRASKA'S LABOR FORCE, 1970-1980

Between 1970 and 1980, Nebraska's labor force increased by 25.3% to 756,882 persons. There was, however, considerable variation in the labor force changes from county to county and among industries. This article examines these changes by comparing 1980 census data from the recently released summary tape file 3 (STF 3) with census data from a decade ago. STF 3 contains tabulations of sample data collected using the "long" census questionnaire. The October and November issues of *Business in Nebraska* used the STF 3 data to examine median family income and poverty in Nebraska. The November issue also provides a more detailed description of STF 3 and indicates how to obtain census data.

The total labor force, comprised of employed and unemployed civilians, as well as members of the armed forces is shown for each county in column 1 of Table 1 (pp. 2 and 3). As defined by the Bureau of the Census, the employed are civilians 16 and over who were either at work the week prior to the census on April 1, 1980, or were temporarily absent from work due to illness, vacation, strike, or other personal reasons. The unemployed are civilians 16 years old and over, not at work (and not otherwise with a job), who were actively looking for work during the four weeks preceding the census and were available to accept a job.

Column 1 shows that, in 1980, 51.4% of the state's labor force was concentrated in just five counties (Douglas, Lancaster, Sarpy, Hall, and Scotts Bluff). This is a slight increase over their 49.7% share of the state's total labor force in 1970. In contrast, the ten counties with the smallest labor forces had less than 500 workers each and their combined labor force accounted for just over 0.5% of the state's total labor force in 1980.

Columns 2 and 3 show the labor force by sex. Although in 1980 there were still considerably more males in Nebraska's labor force than females, the 1.4 male workers per female in 1980 contrasts with the 1970 composition of 1.7 males for each female. The corresponding ratios for the U.S. labor force showed a similar change, dropping from just under 1.7 to 1.37 male workers per female.

Column 8 shows the decade percentage changes in each county's total labor force. Changes in the labor force are determined by changes in the number of persons 16 or over and changes in the degree to which people of this age participate in the labor force. The largest percentage increases in the labor force were in Sarpy and Box Butte counties, where the labor force grew by 73.9% and 72.8%, respectively. These increases represent additions of 18,829 and 2,735 workers to the respective county labor forces over the period. Dakota county's labor force grew by the next highest percent (53.8) with the addition of 2,695 persons. In Figure 1, where percentage changes in the county labor forces have been shown with a map, it can be seen that growth was not confined to any one region, although counties experiencing declines in their labor forces tended to be toward the middle and western regions of the state.

For the state, 152,640 workers were added to the labor force, resulting in the 25.3% increase that was reported earlier. The largest increase in the number of workers was in Douglas County, where 33,600 persons were added to the labor force for a 20.5% increase. Lancaster County added 27,702 workers, while Sarpy County's additions, noted previously, ranked third in size.

It was indicated earlier that change in the size of the labor force is determined, in part, by change in the size of the population that is labor force age (greater than or equal to 16.) Column 7 shows the percentage change in the number of persons in this age group. Although the population of labor force age declined in nineteen Nebraska counties, there were actual declines in the labor force in just nine counties. Kimball, Sherman, Garfield, and Deuel counties each lost between 100 to 160 workers. Losses in the other five counties were less than 65 workers. The 108 fewer workers in Garfield County resulted in the largest percentage decline, 10% of the county's 1970 labor force.

FEMALE LABOR ADDITIONS

The 93,843 females added to the Nebraska labor force between 1970 and 1980 greatly outnumbered the increment of 58,797 males, with about 1.6 females added

(continued on page 3)

Figure 1
PERCENT CHANGE IN TOTAL LABOR FORCE: 1970-1980

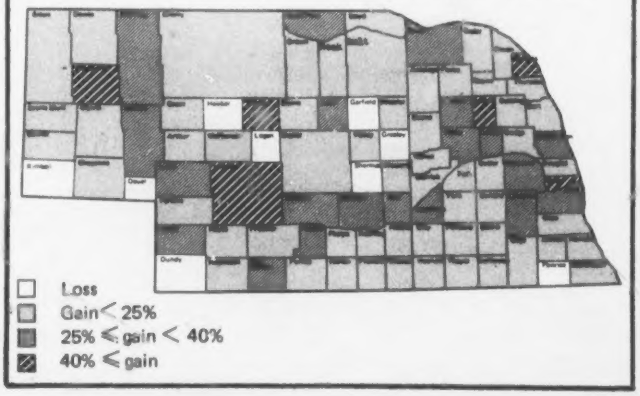

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Table 1
LABOR FORCE PARTICIPATION IN NEBRASKA COUNTIES

	1980						Percent Change 1970-1980				
	Labor Force			Participation Rate (%)			Population 16 and over	Labor Force			Female Participation Rate
County	Total	Male	Female	Total	Male	Female		Total	Male	Female	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Adams	15,149	8,653	6,496	64	77	51	7	18	12	26	18
Antelope	3,438	2,236	1,202	53	71	36	3	5	−3	23	21
Arthur	262	186	76	65	88	40	22	22	26	15	−5
Banner	400	292	108	58	84	32	−5	6	−2	37	39
Blaine	341	245	96	53	76	30	16	5	6	2	−9
Boone	3,163	2,137	1,026	57	78	37	−2	10	5	22	26
Box Butte	6,494	4,126	2,368	65	83	47	43	73	66	86	36
Boyd	1,395	965	430	53	74	33	−1	4	3	7	9
Brown	1,876	1,163	713	57	73	41	17	24	12	52	32
Buffalo	17,299	9,677	7,622	65	77	54	16	31	18	53	29
Burt	3,789	2,390	1,399	56	72	40	2	8	−1	28	26
Butler	3,880	2,423	1,457	55	69	41	6	17	3	53	43
Cass	9,354	5,772	3,582	63	79	48	19	37	25	63	38
Cedar	4,489	2,935	1,554	55	72	38	5	12	3	32	28
Chase	2,045	1,297	748	59	78	42	19	28	20	46	24
Cherry	3,103	2,008	1,095	61	79	43	7	13	4	33	25
Cheyenne	4,740	2,882	1,858	62	77	48	4	15	7	29	28
Clay	3,484	2,199	1,285	57	74	41	6	24	13	51	44
Colfax	4,219	2,652	1,567	56	72	41	11	26	11	60	47
Cuming	5,114	3,332	1,782	59	78	41	6	15	3	45	38
Custer	5,925	3,746	2,179	56	75	40	4	9	1	26	20
Dakota	7,708	4,537	3,171	65	79	52	39	54	39	80	31
Dawes	4,669	2,758	1,911	62	74	49	3	20	16	25	20
Dawson	10,688	6,481	4,207	65	82	50	20	37	26	58	34
Deuel	1,029	651	378	54	71	38	−3	−9	−11	−6	−5
Dixon	3,052	1,940	1,112	58	73	42	2	4	1	9	9
Dodge	16,939	9,870	7,069	62	77	49	13	18	7	36	21
Douglas	197,791	109,991	87,800	67	79	56	12	20	11	34	20
Dundy	1,071	674	397	48	61	35	2	−5	−16	22	21
Fillmore	3,352	2,077	1,275	55	72	40	4	10	−1	35	31
Franklin	1,951	1,198	753	57	72	42	0	4	−5	24	22
Frontier	1,641	1,093	548	59	79	39	−3	2	−7	29	28
Furnas	2,742	1,607	1,135	54	67	42	−2	13	3	31	33
Gage	11,490	6,458	5,032	60	71	50	2	18	4	44	40
Garden	1,359	831	528	61	77	46	4	25	12	52	47
Garfield	1,013	630	383	56	73	40	0	−10	−7	−13	−11
Gosper	950	637	313	58	76	39	12	31	15	83	60
Grant	403	271	132	63	84	41	20	14	23	1	−13
Greeley	1,432	938	494	56	76	38	−9	−1	−12	29	38
Hall	23,560	13,461	10,099	67	81	55	19	31	22	46	26
Hamilton	4,157	2,673	1,484	61	80	42	13	30	19	54	37
Harlan	1,849	1,127	722	55	69	42	4	7	−3	27	22
Hayes	548	427	121	54	82	25	−3	7	13	−8	0
Hitchcock	1,665	1,145	520	54	74	34	6	20	13	39	34
Holt	5,606	3,784	1,822	57	79	36	15	23	20	28	13
Hooker	406	254	152	53	71	37	0	−6	−14	12	3
Howard	2,690	1,673	1,017	54	69	40	9	15	0	55	40
Jefferson	4,650	2,785	1,865	59	74	46	0	12	1	33	34
Johnson	2,353	1,424	929	57	72	44	−1	4	−5	21	21
Kearney	3,255	2,005	1,250	60	77	45	14	23	17	35	19
Keith	4,575	2,705	1,870	66	80	52	21	26	25	26	6
Keya Paha	583	406	177	60	85	36	17	36	28	58	34
Kimball	2,371	1,428	943	65	79	50	−9	−6	−15	10	19
Knox	4,855	3,121	1,734	56	74	40	7	26	8	79	67
Lancaster	105,415	57,115	48,300	69	78	61	24	36	27	47	20
Lincoln	17,086	10,705	6,381	64	83	47	31	45	41	54	19
Logan	411	284	127	58	82	35	−4	−6	−11	9	15
Loup	398	260	138	62	82	42	9	28	3	138	114
Madison	15,418	8,927	6,491	65	79	52	22	36	29	48	23
McPherson	249	190	59	54	81	26	12	15	5	64	53

Table 1 (continued)

	1980						Percent Change 1970-1980				
	Labor Force			Participation Rate (%)			Population 16 and over	Labor Force			Female Participation Rate
County	Total	Male	Female	Total	Male	Female		Total	Male	Female	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Merrick	3,978	2,479	1,499	60	77	44	12	16	11	28	13
Morrill	2,630	1,705	925	57	75	40	11	21	16	32	20
Nance	1,851	1,253	598	52	71	34	−2	3	−1	15	23
Nemaha	3,788	2,267	1,521	58	73	45	−4	5	−5	24	28
Nuckolls	2,925	1,863	1,062	56	74	39	−1	3	−2	15	17
Otoe	6,963	4,033	2,930	60	74	47	4	6	−1	17	13
Pawnee	1,675	1,083	592	53	71	36	−5	−4	−10	12	17
Perkins	1,603	1,045	558	59	78	40	11	12	6	25	13
Phelps	4,934	2,807	2,127	66	81	53	10	22	13	36	23
Pierce	3,772	2,388	1,384	60	77	43	9	18	7	43	32
Platte	14,020	8,261	5,759	67	82	53	19	28	20	40	18
Polk	2,655	1,689	966	56	72	41	2	5	1	12	12
Red Willow	6,100	3,581	2,519	64	79	50	10	26	14	47	35
Richardson	4,894	2,913	1,981	55	70	42	−1	2	−9	25	26
Rock	1,128	707	421	64	82	47	5	22	14	39	35
Saline	5,913	3,404	2,509	57	69	47	7	20	8	41	29
Sarpy	44,324	26,752	17,572	75	89	61	56	74	49	132	45
Saunders	8,229	5,229	3,000	59	75	43	15	31	20	55	35
Scotts Bluff	17,617	10,301	7,316	63	77	49	12	19	9	38	20
Seward	6,991	4,276	2,715	58	70	45	13	14	8	27	14
Sheridan	3,525	2,090	1,435	62	78	48	11	30	16	56	39
Sherman	1,684	1,065	619	54	69	39	−3	−7	−18	18	17
Sioux	802	565	237	57	78	34	−1	12	−7	115	119
Stanton	2,890	1,859	1,031	64	80	46	19	41	25	85	59
Thayer	3,272	2,047	1,225	55	71	40	4	15	8	27	26
Thomas	436	290	146	63	82	42	10	43	29	82	75
Thurston	2,910	1,725	1,185	58	70	46	10	19	5	46	31
Valley	2,445	1,549	896	57	74	40	3	13	2	39	35
Washington	7,284	4,354	2,930	63	77	50	22	36	22	63	34
Wayne	4,797	2,881	1,916	61	76	47	1	18	5	46	40
Webster	2,087	1,286	801	55	71	40	−2	5	−1	16	17
Wheeler	475	315	160	62	82	42	4	17	7	45	37
York	6,946	4,104	2,842	62	78	48	15	23	16	36	18
Nebraska	756,882	442,023	314,859	64	78	51	14	25	15	42	25
United States	106,065,807	61,325,264	44,740,543	62	75	50	21	29	19	46	21

Sources: U.S. Bureau of the Census, *Census of Population: 1970, General Social and Economic Characteristics*, Final Report PC(1)-C1, United States Summary; *Census of Population: 1970, General Social and Economic Characteristics*, Final Report PC(1)-C29, Nebraska; *Census of Population: 1980, Provisional Estimates of Social, Economic, and Housing Characteristics*, Supplementary Report PHC80-S1-1; and unpublished data from STF 3.

(continued from page 1)

for each male. The increased participation of females in the labor force is an important explanation of the increase in the total labor force of Nebraska and most counties. The 1980 female labor force participation ratio, which is the ratio of the female labor force to the female population 16 and over, is shown in column 6 (multiplied by 100) and the percentage change in this rate between 1970 and 1980 is shown in column 11. For the state, the female labor force participation rate increased by nearly 25%, from 41.1 in 1970 to 51.3 in 1980. An idea of the importance of this change can be obtained by multiplying the difference between the 1980 and 1970 female labor force participation rates (10.2) times the 1970 female population of labor force age (537,347). The result is that more than 54,000 additional females were in the Nebraska labor force in 1980 than in 1970, due to changes in the labor force participation of females. This accounts for well over half of the total increase in the female labor force and for more than one-third of the change in the total labor force. Increases in the number of persons 16 and over accounted for much of the remainder of the labor force increase, since the male labor force participation rate changed very little (from 77.6 in 1970 to 78.0 in 1980).

Some of the largest changes in participation rates were among females with children. In 1980, there were slightly more than one hundred thousand women with children under six and half of these women were in the labor force. Just ten years earlier, only 33% of women with children this age participated in the labor force. Between 1970 and 1980 participation rates changed from 50% to 67% for women with children between 6 and 17.

EMPLOYMENT BY INDUSTRY

Table 2 (p. 6) shows employment data by industry for Nebraska and the United States. The table excludes workers that were unemployed by the census definition. Column 1 indicates the number of persons employed in Nebraska in 1980 by industry. Column 3 shows the percent

(continued on page 6)

Review and Outlook

Nebraska's net physical volume index increased 0.9 percent August-September 1982. Nebraska's economy remained depressed below year-ago levels despite the monthly increase.

Construction, manufacturing, and the distributive trade sectors recorded increases, while agriculture and government declined. Construction recorded a slight increase of 0.5 percent, with the manufacturing component recording an increase of 1.6 percent. It is too soon to determine, of course, if the September increase represents an upturn or if it is simply a reaction to the depressed conditions of the previous months. Since May 1982, the rate of decline in the manufacturing sector has slowed considerably.

The distributive trade component of the index recorded a substantial monthly increase of 4.8 percent. This is the largest monthly increase in the distributive trade component in three years.

The agriculture component of Nebraska's economy declined 11.1 percent on a month-to-month basis. Cash farm marketings, seasonally adjusted, were down sharply. Prices received by Nebraska farmers are off 3.6 percent when compared with one year ago, while prices received by U.S. farmers are up 1.6 percent. Cash farm marketings from Nebraska farms are off 5.4 percent on a year-to-date basis.

September 1982 retail sales were $4 million above one year ago. The increase was led by motor vehicle sales, which were $10 million higher in September of 1982

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

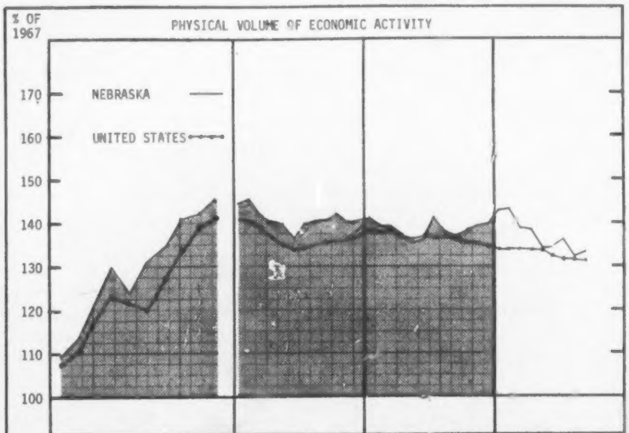
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

September 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	101.7	100.5	103.4	102.5
Agricultural	102.7	101.7	129.0	104.5
Nonagricultural	101.5	100.4	100.1	102.5
Construction	86.6	99.5	72.9	93.7
Manufacturing	83.7	88.0	88.6	93.3
Distributive	107.0	104.9	103.5	105.9
Government	106.2	105.9	109.9	109.1
Physical Volume	97.8	96.0	99.1	96.8
Agricultural	106.5	100.1	135.8	109.3
Nonagricultural	96.6	95.8	94.4	96.4
Construction	86.4	99.2	70.9	91.3
Manufacturing	82.2	86.6	86.6	90.8
Distributive	101.9	99.9	97.0	99.3
Government	99.2	97.9	101.5	98.1

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	369.6	362.3
Agricultural	330.3	355.5
Nonagricultural	375.4	362.6
Construction	207.8	309.4
Manufacturing	316.8	280.8
Distributive	406.1	410.8
Government	409.1	371.8
Physical Volume	133.4	131.2
Agricultural	135.4	142.2
Nonagricultural	133.0	130.8
Construction	63.0	93.8
Manufacturing	131.8	114.3
Distributive	138.5	140.1
Government	145.4	144.8

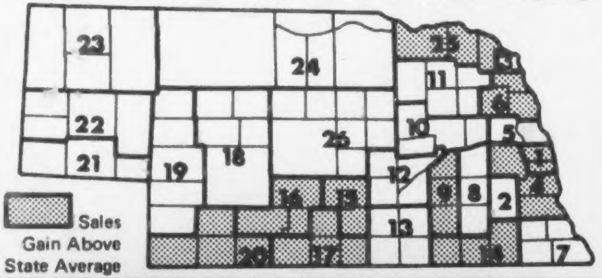


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Sept. 1982 as percent of Sept. 1981	Sept. 1982 as percent of Sept. 1981	Year to date'82 as percent of Year to date'81
The State	95.8	97.2	94.6
1 Omaha	103.0	104.4	98.0
Bellevue	107.2		
2 Lincoln	82.8	85.0	94.1
3 So. Sioux City	81.7	88.5	89.4
4 Nebraska City	95.8	100.9	95.3
5 Fremont	92.3	95.7	94.1
Blair	103.5		
6 West Point	112.2	104.2	98.7
7 Falls City	86.9	91.8	94.1
8 Seward	85.2	90.9	94.4
9 York	91.8	100.5	95.6
10 Columbus	102.4	98.3	91.4
11 Norfolk	93.0	94.4	92.7
Wayne	102.6		
12 Grand Island	94.8	97.0	91.9
13 Hastings	95.1	98.4	90.0
14 Beatrice	90.3	98.9	94.9
Fairbury	106.0		
15 Kearney	102.7	103.2	97.0
16 Lexington	103.0	104.5	96.4
17 Holdrege	95.7	102.4	96.0
18 North Platte	101.6	103.2	93.5
19 Ogallala	99.3	98.8	91.3
20 McCook	110.6	111.9	96.8
21 Sidney	113.7	99.3	92.9
Kimball	81.2		
22 Scottsbluff/Gering	82.2	86.5	89.7
23 Alliance	88.1	92.5	88.8
Chadron	96.9		
24 O'Neill	88.8	93.6	89.8
25 Hartington	102.6	103.5	95.5
26 Broken Bow	89.4	97.0	90.2

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4)

compared with one year previous. Nonmotor vehicle retail sales were down $6 million over the same interval.

Trade centers with increases in real retail sales include Omaha, Bellevue, Blair, West Point, Columbus, Wayne, Fairbury, Kearney, Lexington, North Platte, McCook, Sidney, and Hartington. Sidney's 13.7 percent increase in real retail sales led all Nebraska trade centers.

Sidney led all Nebraska trade centers with better local business conditions in September 1982 compared to one year ago. Other cities showing gains, according to the Bureau's city business index include Nebraska City, Bellevue, McCook, and Chadron.

The outlook for 1983 is not encouraging for Nebraska or the nation. For the United States, real gross national product should increase 2 to 3 percent. This would be below the long-term average of 3.5 percent. Per capita real disposal personal income, the amount available to consumers, has increased little since 1979. Slight gains may be recorded in 1983, but it is doubtful that these gains will equal increases recorded in previous years. Unemployment is expected to remain high nationally, dropping to below 10 percent by mid-year.

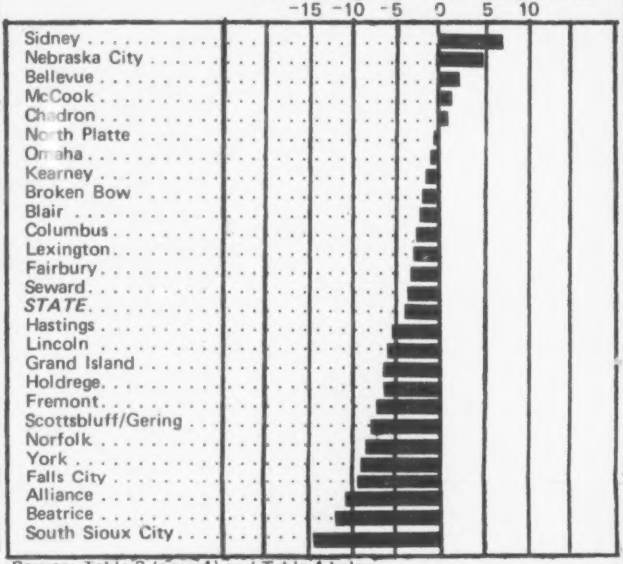
The outlook for the Nebraska economy is less encouraging because of depressed grain and livestock prices. Gross state product will likely increase no more than 1 percent in real terms in 1983, far below the average real increase of approximately 3.75 percent recorded during the 1970s.

Nebraskans will benefit from lower rates of inflation and lower interest rates in 1983. Inflation, measured by the commodity component of the consumer price index, is now averaging less than 4 percent per year. The overall consumer price index is expected to increase on the order of 4 to 6 percent in 1983. The commodity component of the consumer price index will probably show a less substantial increase in prices.

Short-term interest rates and long-term rates are expected to average less in 1983 than in 1982. Interest rates are likely to decline from present levels, although short-term rates especially may be subject to erratic movement up and down in 1983. The overall tendency will be for interest rates to decline in 1983.

D. E. P.

CITY BUSINESS INDEXES
Percent Change Sept. 1981 to Sept. 1982



Source: Table 3 (page 4) and Table 4 below.

4. SEPTEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	96.4	92.1	98.4
Alliance	91.3	72.3	101.0
Beatrice	97.4	25.5	96.1
Bellevue	96.6	109.4	102.7
Blair	97.4	61.4	104.3*
Broken Bow	103.4	130.2	113.1
Chadron	105.1	106.0	113.7
Columbus	92.2	95.7	101.8
Fairbury	98.8	31.5	94.6
Falls City	100.1	46.6	89.7
Fremont	95.3	66.7	100.7*
Grand Island	93.7	75.1	100.1
Hastings	95.9	76.2	87.0
Holdrege	95.9	56.0	108.1
Kearney	97.0	75.3	100.7
Lexington	94.3	68.4	67.4
Lincoln	96.4	193.1	101.4
McCook	91.9	108.2	115.3
Nebraska City	96.8	547.1	92.7
Norfolk	93.6	58.8	93.3
North Platte	98.1	99.7	102.6*
Omaha	96.6	94.0	99.7
Scottsbluff/Gering	98.3	108.3	102.7
Seward	102.1	147.1	100.1*
Sidney	99.2	123.4	117.6
So. Sioux City	100.9	22.9	98.0
York	96.4	42.7	96.4

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

September 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	293.3	105.0	106.7
Commodity component	266.6	103.5	104.1
Wholesale Prices	299.5	101.3	103.0
Agricultural Prices			
United States	250.0	101.6	95.5
Nebraska	244.0	96.4	95.2

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

(continued from page 3)

increase in employment in each industry between 1970 and 1980, while the fifth column gives each industry's share of the state's 1980 total employment. Columns 2, 4, and 6 provide corresponding information for the United States.

The largest industries in Nebraska in terms of employment were professional services, with over 148 thousand employed, and retailing, with about 120 thousand employed. STF 3 tabulations group agriculture, forestry, fishing, and mining together. Employment corresponding to this combined classification declined between 1970 and 1980, resulting in manufacturing replacing agriculture as the third largest industry in Nebraska in terms of the number of persons employed. Manufacturing's share of total employment increased only slightly, from 13.7% to 13.8%, but the share of the classification including agriculture declined from 14.1% to 11% between 1970 and 1980. Combined employment in the four industry classifications accounted for more than 60% of Nebraska's employment in 1980.

The largest percentage increases in employment were in transportation and in the category consisting of business and repair services—each increased by about 70%. The increase in health services employment (included in professional and related services) was almost 60%. These increases are more than twice as large as the 24.4% increase in total employment in Nebraska.

A comparison of columns 5 and 6 of Table 2 indicates that differences in agriculture and manufacturing shares of employment are the main differences between the Nebraska and U.S. distribution of employment among industries. These differences are smaller than in 1970. The percent of total U.S. employment that was in manufacturing declined from about 26% in 1970 to 22.3% in 1980, and remained almost stable in Nebraska. The share of employment in the agriculture category dropped from 14.1% to 11% in Nebraska, but only from 4.5% to 4.0% in the United States between 1970 and 1980.

D. O. L.

Table 2

EMPLOYMENT BY INDUSTRY IN NEBRASKA AND THE UNITED STATES, 1980

	Employment 1980		% Change in Employment 1970-1980		% of Total Employment 1980	
	Nebraska	U.S.	Nebraska	U.S.	Nebraska	U.S.
	(1)	(2)	(3)	(4)	(5)	(6)
Agriculture, Forestry, Fisheries, Mining	78,840	3,927,232	−3	13	11.0	4.0
Construction	43,296	5,765,627	27	26	6.0	5.9
Manufacturing	99,046	21,798,171	25	10	13.8	22.3
Transportation	40,771	4,230,987	69	50	5.7	4.3
Communication, Other Public Utilities	26,063	2,826,010	29	20	3.6	2.9
Wholesale Trade	33,961	4,250,145	36	36	4.7	4.4
Retail Trade	120,958	15,795,183	16	29	16.9	16.2
Finance, Insurance, and Real Estate	44,014	5,821,955	47	52	6.1	6.0
Business and Repair Services	24,929	4,073,316	69	70	3.5	4.2
Personal, Entertainment, and Recreation Services	27,236	4,092,479	−11	−2	3.8	4.2
Professional and Related Services	148,775	19,782,125	38	46	20.8	20.3
Public Administration	28,744	5,267,831	14	25	4.0	5.4
Total:	716,633	97,631,061	24.4	27.5	100	100

Sources: See Table 1.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

60 Years of Service

BUILDING A BUSINESS WITH NO OUTSIDE STOCKHOLDERS

The following remarks were presented by Mr. Roy H. Park, Visiting Executive in the College of Business Administration, University of Nebraska-Lincoln, on September 15, 1982. Mr. Park is president of Park Broadcasting, Inc., and Park Newspapers, Inc. His entrepreneurial spirit has carried him through various careers, including the development of the well-known Duncan Hines brand label. When Hines-Park Foods merged with Proctor and Gamble in 1956, Mr. Park joined P & G as a consultant. Mr. Park was one of the first to realize the power of television in marketing products. Today, his corporation owns 7 TV stations, 7 AM and 7 FM stations, and his was the first company given permission by the Federal Communications Commission to own 21 stations. His newspaper interests include ownership of more than 60 papers. His presentation to the students and faculty sets out his experiences, along with suggestions on what is important to determining success. It is printed here for guidance for today's students and generations of students to come.

Looking around the room, I can't help feeling just a little bit jealous of the opportunities that lie ahead for you. And the reason is—like a theme the steamship lines used some years back—"Getting there is half the fun!" To me, with a business career, "getting there" is closer to 90 percent of the fun—and I've had most of mine. Yours is still up front; I admit to just a touch of envy.

I have been told that after graduation one out of every four of you will go to a Fortune 500 company. An even larger number of you will go into the accounting field, including jobs with the big eight accounting firms. Others will move into finance, banking, insurance, economics, management, and marketing. One or two percent of you will go back to family-owned businesses, and I'm pleased to say that—perhaps as an indication of the times and new philosophy—only a handful will choose government bureaucracy.

I want to offer *another* choice for your consideration—one, I'm told, just a few of you from the class each year commit themselves to: *Going into Business for Yourself.* Entrepreneurship built our country, and some of the early leaders who bore the entrepreneur label with pride were Thomas Edison, Henry Ford, and Harvey Firestone.

Of course, you do not just walk off campus and launch your own successful business. You need some practical experience. You cannot run a business out of a manual any more than you can farm out of a book. If you *are* considering going into business for yourself, first get located in someone else's business where you can get the practical experience to supplement your education. Deliberately *position* yourself to *learn* about the type of business you eventually want to establish.

Despite the age gap between us, there *are* eternal constants. One of them, I think, is that you have to *know* you want your own business—you cannot get much useful help here from parents, friends, or even from me. *You* have to know. So don't ask yourself, "*Can* I build a highly successful career in my own business?" Ask yourself instead, "How much do I really *want* to?"

Once you have decided to point toward having your own business, you can get basic experience in other businesses without starting at the bottom of the pole as the graduates in my alma mater at North Carolina State University had to do—and if you went with the telephone or power company in the thirties, that was *not* just a figure of speech!

Another thing you have today that I didn't (and have always been grateful for) is the *agony* of *choice.* Your options are not as endless today as they were a few years ago, but you do not have to start at the very bottom. You may sacrifice starting salary, as I did, to find opportunities I was looking for—a place to exercise initiative, make decisions, and have a little free time to work out some of my own ideas. I probably could have "done alright," just as you can, if I had gone with a big company and just "stayed put." But, from the beginning, I *wanted my own business.*

So I bypassed the bigger companies to get into what was a new and exciting business in the thirties—farmers' cooperatives. There were two headquartered in Raleigh, North Carolina—one in cotton and one in tobacco. I took a job as editor, advertising manager, and publicity manager for the North Carolina Cotton Growers Association, and while the job does not sound very glamorous, over the next eleven years it gave me the chance to develop sales programs, write and place the advertising, develop and launch some trade publications of my own, and to operate a printing plant, of which I was one-third owner.

By the end of that time, I had learned basics in print and communications that have never left me, and I learned work habits—borne of a deliberate self-discipline—that are unchanged today. (Today, they would call me a "workaholic," but then, in depression years, the whole outlook toward work was quite different.)

One basic precept that has worked well for me is a very simple one—if you see a need, figure out a way to fill it. If it is a genuine need, and you have a sound answer

(continued on page 2)

(continued from page 1) to that need, then the reward will take care of itself.

As a graduate in business with a minor in journalism, I was a careful reader of all trade publications in the communications and business field. Back then, newspapers had *Editor and Publisher* and, during the early part of my career, *Broadcasting* magazine made its appearance.

It struck me that with some 15,000 farm cooperatives across the country, it was strange that there was no magazine for farm cooperative executives—when *Editor and Publisher* was highly successful serving less than 2,000 daily newspapers. So, I decided to start a trade magazine for farm cooperative leaders, which I named *Cooperative Digest*. It had a simple formula. The first 18 pages contained news as to what farm cooperatives were doing, and the last 18 pages carried condensed articles from speeches by outstanding farm cooperative leaders and condensations of articles they might write.

Dr. H. E. Babcock, Chairman of the Board of Trustees at Cornell and the founder of GLF, now Agway, wrote an article back in the early forties on farm cooperatives and their future for the *Saturday Evening Post*, which was then picked up by the *Reader's Digest*. My *Cooperative Digest*—with less than 10,000 circulation—reprinted this article and Dr. Babcock got more replies from my reprint than from the original article in the *Post* plus the condensed version in the *Reader's Digest*. This impressed him, and I presume he thought that I must be a wizard in my field. At any rate, he looked me up and offered me a very attractive position to come to Ithaca and handle the advertising, promotion, and public relations of what was then the largest farming cooperative in the world.

I felt I had to tell him at the outset that I would move *only* to have my own business. "Young man," Mr. Babcock said, "You just bought it." "What business did I buy?" I asked. "Your own ad agency," he replied. "If you need money, we will lend it to you."

Well, it was not an offer from the Godfather, but it *was* too good to refuse.

I took over what was essentially the GLF cooperative's advertising and PR department of seven people. We called ourselves "Ag Research," pioneered in a good many market research techniques, and began to make money by doing good work at reasonable rates. By serving similar types of farm businesses, we opened branches in five other large eastern cities, grew to employ one hundred twenty-five people, and were going just great six years later when I fell on my face.

My mistake was in getting into political advertising, where we did two successful gubernatorial campaigns for Tom Dewey in New York state and handled his farm and small-town promotions for his two presidential campaigns in 1944 and 1948. Right after our man lost, we offered all our clients the opportunity to change agencies if they wished, and a lot did.

A good marketing study we made through Ag Research had convinced me that these cooperatives were *not* willing to spend the hard dollars required to launch their own consumer brand. So, I recommended that they *franchise* a brand instead, using a name already established in the food field, and they accepted the idea.

Many names were considered—in the hundreds—but none filled the bill until I came across Duncan Hines. That was a name that made me almost snap my fingers—for I just *knew* that was the one. I arranged to meet Duncan Hines, and in preparation I did my homework on every available detail of his professional and business life as a gourmet and travel authority. When I kept my appointment with him at the Waldorf Towers in New York City, I was the world's top expert on Duncan Hines! And, if I can preach for a moment, it is always an advantage to be better prepared than the other fellow.

"So, you are going to make me a millionaire," he said, after formalities. From my research, however, I knew he did not really aspire to great wealth. I figured, too, that he had been approached with "get rich" schemes many times. So I told him, "No, we are not going to make you a fortune, but by making your name more meaningful in the home, you can upgrade American eating habits."

Knowing, too, that he never endorsed anything, we had come prepared with completely finished Duncan Hines labels, in full color, on dummy containers—so that he could see what the concept would look like. He bought it—and in so doing brought me into my second business. The sale was made when I told him we were not seeking an endorsement, but that we wanted to name something for him. *It worked.*

We began planning and product testing in earnest, and employed the sound research principles we had used in Ag Research, including the use of "blind tests" on every product *before* market introduction to assure ourselves of a basic product difference. We held firm that there had to be a real advantage in appearance (as in beautiful, uniform olives in a glass jar), in feel or texture (as in bread), or in taste (as in rich ice cream). Then after working out the financing—which I will go into a little later—we began accepting franchise applications from good food processors who had no recognized brand name of their own.

Rigid quality controls, approved by Mr. Hines, were maintained from the start, and we were soon packaging a variety of foods under the Duncan Hines name, which we test-marketed in New England, the Midwest, and the South. The test marketing proved that the name Duncan Hines had consumer appeal and that it responded effectively to advertising and promotion.

The next step was to set up a corporation which could take over the rights to the Duncan Hines brand name and would have the financing necessary to develop a franchising program among quality food processors.

Our brand not only had quality and consumer acceptance, but our marketing strategy had a very significant advantage over brands such as S. S. Pierce, which shipped foods into Boston for packaging and labeling and then back across the country to the food stores. We shipped the labels to the product—not the product to the labels—resulting in a substantial savings in transportation costs.

Duncan Hines cake mix, manufactured by Nebraska Consolidated Mills in Omaha, now ConAgra, came to be the line's most resounding success. The brand captured forty-eight percent of the Omaha market in just three weeks after introduction, then continued to make startling market inroads throughout the country. In three or four years, Duncan Hines cake mixes were "giving fits" to old and well-known names—Swanson, Pillsbury, Aunt Jemima, and Betty Crocker. We could never *out-spend* those

(continued from page 4)

been outright purchases of established facilities, the exception being a few we built and put on the air. There are no "giants" among them, but all cover key TV market areas, and we have been careful to stick to the top one-hundred markets, which attract most advertising budgets. Our seven TVs, together with our fourteen radio stations, cover roughly 14.5 percent of the total population in this country—or, putting it another way, our broadcast stations can be seen or heard by almost 32 million people—after eliminating any duplication in our joint TV and radio markets.

We had to buy radio stations where we could get them, and they are located across the nation from the Atlantic to the Pacific. Present broadcast operations total seven TV stations, seven AM and seven FM stations—the maximum number permitted by FCC regulations. We were the first to reach this milestone.

As we approached our limit in broadcasting properties, we moved to my first love in communications: newspapers. We bought our first newspaper in 1972, the *Daily Sun* of Warner Robins, Georgia, for cash. We have since added others in New York state, Virginia, Florida, Nebraska, Indiana Oklahoma, North Carolina, Illinois, Michigan, Arkansas, and North Dakota, for a total of sixty-two, which includes twenty-two dailies. Most could be called small-town newspapers, with circulations in the 10,000-20,000 range. Publishing staffs have been retained intact in nearly all cases, with only ownership changing. We do not employ any "new broom" approach. In terms of daily circulation, our newspaper group now ranks forty-nine among the one hundred seventy newspaper groups in the United States today. We like newspapers, and it's our intention to continue to acquire good community dailies located east of the Rockies. We're actively seeking good properties at the present time . . . in case you know of any.

Our broad approach to managing our interests is to allow the widest latitude, amounting to virtual autonomy, to *local* management. To each property we provide management service of high order on a fee basis, which runs four percent of gross billings. Our contribution to the separate operations falls primarily into four categories:

- Leadership,
- Stimulation,
- Motivation, and
- Financial control.

Each of our sixty separate companies has its own Board of Directors, and we hold regular meetings at a number of our business operations where former owners serve as directors. Veto power over major business decisions is retained in Ithaca, but day-to-day operations are under individual control, subject only to precise reporting and business

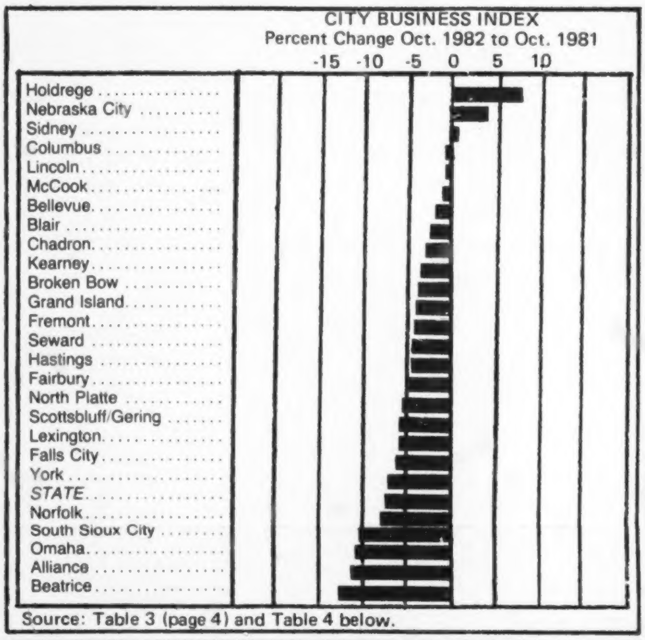
(continued on page 6)

5. PRICE INDEXES

October, 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	294.1	105.1	106.6
Commodity component	267.5	103.7	104.1
Wholesale Prices	299.9	101.3	102.8
Agricultural Prices			
United States	238.0	98.3	95.8
Nebraska	232.0	95.9	95.3

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.



CITY BUSINESS INDEX
Percent Change Oct. 1982 to Oct. 1981

Source: Table 3 (page 4) and Table 4 below.

4. CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	96.7	101.0	95.9
Alliance	92.1	98.2	137.1
Beatrice	97.9	18.3	94.3
Bellevue	97.5	147.0	102.4
Blair	96.8	59.1	98.3
Broken Bow	98.0	47.9	111.8
Chadron	100.3	98.5	123.3
Columbus	90.4	93.1	90.8
Fairbury	98.6	56.6	91.1
Falls City	98.5	44.0	88.2
Fremont	96.2	64.4	91.6*
Grand Island	94.4	102.5	98.3
Hastings	98.4	109.0	140.7
Holdrege	96.4	69.7	93.9
Kearney	97.9	95.7	101.4
Lexington	94.6	56.5	70.5
Lincoln	98.8	258.6	91.3
McCook	91.4	93.7	104.2
Nebraska City	97.0	587.2	87.2
Norfolk	94.3	54.4	87.3
North Platte	95.3	82.7	105.7
Omaha	97.5	91.1	93.5
Scottsbluff/Gering	98.0	95.3	126.0
Seward	100.0	101.9	86.7
Sidney	100.1	184.2	120.9
So. Sioux City	98.3	19.7	95.7
York	96.3	65.1	96.2

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

- In all acquisitions—if you possibly can—offer to buy for *cash*. It sure gets you the best price, and will knock out of the box the fellow who offers a small down payment, and notes on the property he is buying.
- Lastly, avoid tying up your personal assets and those of your wife and family. Banks try to get their hands on everything. If you have a good record, however, they'll listen to reason. But as a banker friend of mine says, banks just never have all the security they want.

Now those are some of the key points in obtaining bank financing and dealing with banks successfully, as we've been able to do. And once we've "gone into business" with a bank, we've never pulled away from one—nor had a bank pull away from us. Our companies use about eighty local banks, mostly as temporary local depositories, have lines of credit with seven, but actually rely on two primary banks for financing our acquisitions.

From 1962 to 1972 we built our basic broadcast operations, both TV and radio, and by 1977, we had our limit of twenty-one stations. We acquired our first outdoor advertising plant in 1962. Entry into outdoor was based on experience previously mentioned that showed outdoor to be effective reinforcement for television. Furthermore, with a 78-month depreciation schedule, it is a good "cash cow." Today, with bigger, cleaner signs, outdoor is a growing business because it does an effective job.

Most of our broadcast stations have (continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

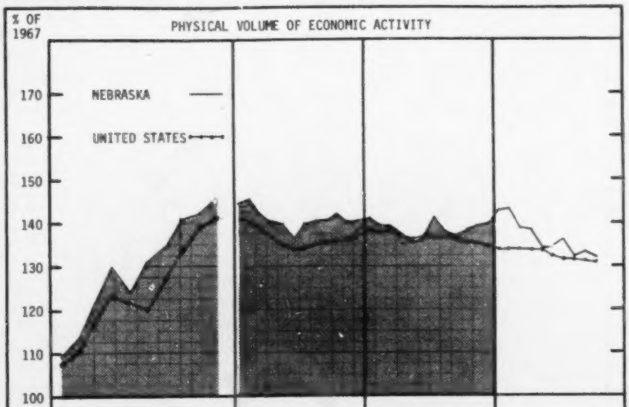
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

October, 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	N/A		N/A	
Agricultural	N/A		N/A	
Nonagricultural	101.2	101.0	100.3	102.3
Construction	90.7	101.8	74.3	94.4
Manufacturing	81.3	88.6	87.8	92.8
Distributive	106.6	105.6	103.9	105.9
Government	107.5	105.5	109.8	108.8
Physical Volume	N/A		N/A	
Agricultural	N/A		N/A	
Nonagricultural	96.2	96.6	94.6	96.4
Construction	90.1	101.2	72.4	92.1
Manufacturing	79.8	87.4	85.9	90.4
Distributive	101.5	100.5	97.4	99.4
Government	101.1	98.7	101.7	98.3

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	N/A	N/A
Agricultural	N/A	N/A
Nonagricultural	374.3	363.5
Construction	207.1	312.8
Manufacturing	303.0	278.8
Distributive	407.0	412.3
Government	417.7	376.4
Physical Volume	N/A	N/A
Agricultural	N/A	N/A
Nonagricultural	132.1	130.8
Construction	62.6	94.5
Manufacturing	126.2	113.1
Distributive	138.4	140.2
Government	147.7	146.2

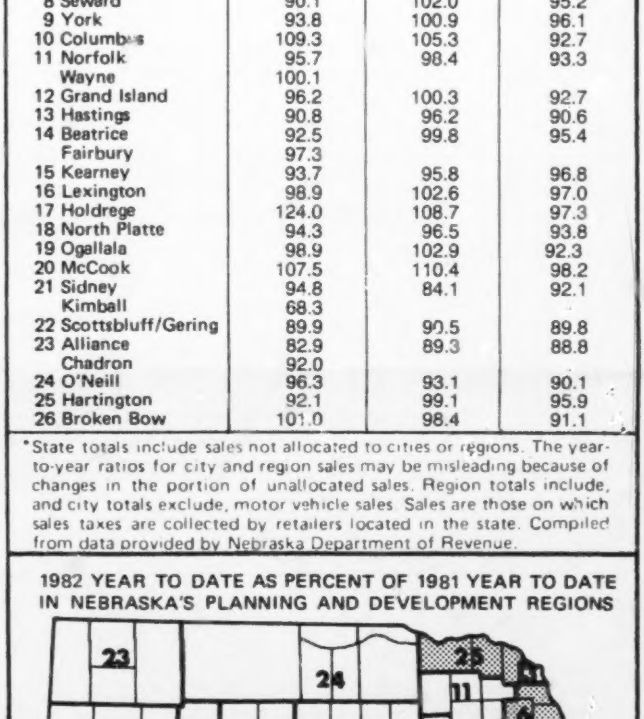


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales *	Sales in Region *	
	Oct. 1982 as percent of Oct. 1981	Oct. 1982 as percent of Oct. 1981	Year to date '82 as percent of Year to date '81
The State	88.0	90.3	94.1
1 Omaha	78.9	82.9	96.3
Bellevue	92.1		
2 Lincoln	89.7	91.8	93.9
3 So. Sioux City	96.7	94.8	89.9
4 Nebraska City	90.9	98.2	95.6
5 Fremont	99.2	102.1	94.9
Blair	101.5		
6 West Point	103.1	108.0	99.6
7 Falls City	97.4	92.7	93.9
8 Seward	90.1	102.0	95.2
9 York	93.8	100.9	96.1
10 Columbus	109.3	105.3	92.7
11 Norfolk	95.7	98.4	93.3
Wayne	100.1		
12 Grand Island	96.2	100.3	92.7
13 Hastings	90.8	96.2	90.6
14 Beatrice	92.5	99.8	95.4
Fairbury	97.3		
15 Kearney	93.7	95.8	96.8
16 Lexington	98.9	102.6	97.0
17 Holdrege	124.0	108.7	97.3
18 North Platte	94.3	96.5	93.8
19 Ogallala	98.9	102.9	92.3
20 McCook	107.5	110.4	98.2
21 Sidney	94.8	84.1	92.1
Kimball	68.3		
22 Scottsbluff/Gering	89.9	90.5	89.8
23 Alliance	82.9	89.3	88.8
Chadron	92.0		
24 O'Neill	96.3	93.1	90.1
25 Hartington	92.1	99.1	95.9
26 Broken Bow	101.0	98.4	91.1

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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giants—so we *out-thought* them.

Mixes had mainly been marketed as a "just add water or milk" convenience item. But, in keeping with the Duncan Hines name and quality reputation, we altered the standard formula by leaving in the dried milk and removing the dehydrated eggs. Next to a picture of Duncan Hines on every cake mix package was this statement, in quotes: "I have found that strictly fresh eggs mean a bigger, better cake . . . in appearance, flavor and freshness."

Too, knowing throughout that we were "running with the big boys," we had to do things differently—and did. We were first (late forties) to sell cake mix on TV, with Mr. Hines, himself, doing the commercials. The finished cake photographed beautifully on camera—"frosted" with heavy axle grease, which better withstood the hot lights. (Today, we would probably have to deal with consumer advocates if we did that!)

We were also first to figure out that outdoor advertising was really "outdoor TV," so we used the same visual theme for both our TV and outdoor ads, reminding the housewife on her way to the store of Duncan Hines, and of last night's TV commercial.

We were first to use four-color ads in newspapers, since it did not make sense to take full-color in national women's magazines when we had only partial distribution. We used the newspaper's comic presses, which back then were the only way to get newspaper color. Sure it was crude, but it all tied together with TV and outdoor, and it *worked.*

Ad men are always talking "dog and pony shows," and we really had one on the road, with mayors from Albany, N.Y., to San Francisco presenting Hines the keys to the city and proclaiming "Duncan Hines Day"—all the unvarnished hokum Americans have loved since the days of P. T. Barnum. And, in a more serious marketing vein, the Duncan Hines Day usually concluded with a big reception and sit-down dinner, attended by the governor and assorted big-wigs, plus the key chain food store buyers. Again, using a new wrinkle, all were invited to bring their wives—this last almost unheard of back then. With a corsage presented on arrival and an autographed Duncan Hines cookbook when they left, the wives found it a memorable family affair. Our people were under strict orders to sell nothing to anyone—at the party. Next day was another story.

These techniques—plus good products and tight quality control—put Duncan Hines cake mixes number two among all brands in sales, despite distribution in only twenty-three states. It was the cake mix that made the Duncan Hines line a marketing force to be reckoned with, and which led directly to a merger proposal from Proctor & Gamble in 1956, just about five years after our cake-mix launching.

Let me tell you how our food company was set up before we talk about the acquisition by Proctor & Gamble. To leave my options to operate completely open, I frankly prefer to own one hundred percent of a business. In the arrangement of initial financing for Hines-Park Foods, however, I didn't have enough money, so some preferred stock was sold with common stock as a bonus in the package. Confidence by potential investors and your own faith in yourself are about all you have going for you in the beginning—although in my case, Duncan Hines's name certainly didn't hurt!

Proctor & Gamble came along with a proposal built around a tax-free merger of Hines-Park Foods into P&G, and exchange of shares of Hines-Park for their stock. Thus, in 1956, I relinquished my stock control of Hines-Park, but importantly, the move provided the initial financing base on which to start building businesses which I would own outright.

Other elements of my contract with Proctor & Gamble required that I work for them for three years and continue as a consultant to them for an additional seven, without competing. Actually, it was a generous arrangement that I found so pleasant and stimulating, I remained an active executive with them for seven years, not three, and only a few years back concluded my consulting arrangement with P&G. Oh, there was one more provision written into the initial agreement: that I be allowed to work on my *own* business fifty percent of the time.

At P&G, I was heavily impressed from the beginning with the great marketing power of television. And I watched as more and more advertising dollars moved out of magazines and out of newspapers, and into TV. It looked to me like the coming medium—the "great growth" medium, and it turned out to be just that.

When we bought our first television station, WNCT-TV in Greenville, North Carolina, in 1962, TV industry ad expenditures totaled $1.89 billion; in 1982—almost $13 billion; projected for 1985, $21.3 billion—almost eleven times as much as in 1962. And now hold your breath—the projection for 1990 is $40.72 billion, almost double in five years and twenty times as much as in 1962 when I bought my first station.

Much as I had enjoyed (and learned from) my association with Proctor and Gamble I was champing at the bit to get back on my own. With acquisition of the Greenville, North Carolina, television station, I was back on my own . . . with the help of a million dollar note to an insurance company and a million and a half dollar loan from Wachovia Bank and Trust Company in North Carolina, collateralized by P&G stock.

My approaching an insurance company for financing was based wholly on a personal relationship. I had come to know the president of Massachusetts Mutual through my directorship of what is now ConAgra, and the financing his firm had provided to this company. At a later date, while arranging financing for our second station through a bank, I found that banks would go as high as eighty percent to finance a good property, while an insurance company, back in those days, would not go more than thirty percent.

Here are some rules I have learned:

- Loan obligations are critically important to your credit, and your reputation pivots on your repayment record. Meet payments *on* time or *ahead* of time *every* time.
- Banks *don't* like surprises, particularly bad news on *your* operation that they hear elsewhere, or dig up themselves. Keep them fully informed, ahead of time, and especially do this if the news is bad.
- "Mortgage the limbs, but never the trunk." Borrow on the separate companies you hold, but keep the parent corporation liquid to provide the "down" money for possible acquisitions and emergency needs.
- In financing any kind of business, deal with a bank experienced in backing your kind of business, and always deal with the top man—he can make decisions. In any business there are plenty of people who can say no—only a limited few can say yes and make it stick.

(continued on page 4)

(continued from page 5)

disciplines which measure accountability and insure performance.

We place no *editorial* restrictions on either broadcast or newspaper management, with these exceptions: broadcast editorials are kept *occasional,* confined to *local* issues, and aired only by the local station manager. We want to have something relevant and helpful to say—not just fill time. Our newspaper editorials are governed only by good common sense, and use whatever space is needed and justified by the issues of the day—again, with emphasis on, but not limited to, local causes.

Now, for your big question: How do we run all this?--it must take an executive regiment. No, it doesn't, but we do have some of the best executives you could find. We hire people with good I.Q.s, who are not afraid to work, and who are morally straight, honest, square dealers.

Only eight operating executives are involved in our headquarters operation, including myself. There are executives in charge of newspapers, television, and radio divisions. We also have separate executives for real estate and outdoor, and one for overall finance and an overall controller.

There are only thirty corporate employees in Ithaca, mostly in auditing, clerical, and maintenance. We monitor our field operations carefully, hold regular meetings to bring the judgment of the whole group to bear on problems, and share the committee approach found in many large companies.

The total gross assets of these companies are approximately $170 million as of June 30, 1982. Total sales were approximately $80 million in calendar 1981 and will approach $90 million in 1982.

In building a sound business operation of this size without stockholders, I've had some headaches—and been spared some, too. Stockholders' meetings can do awful things to a president's nervous system, and so can dividend demands. In building my business, I've learned some things that I think will bear passing along "one more time"—and I'll keep them brief:

1- Pay attention to details, they *do* make a difference.
2- Get things done on time—learn to answer your mail the same day you get it, and tackle and resolve problems promptly.
3- Delegate to others as much as you can—and you will be surprised that often they can handle these things as well as, or better than, you can. Even so, you must constantly check up to see that nothing falls through the crack.
4- Use showmanship, imagination. Dramatize what you're doing.
5- Take action. If you have the facts and a little common sense, and you *move,* you've got better than a fifty percent chance of being right.
6- Do your business homework. I've never bought a property that I didn't bone up on and know more about than the man or people who owned it.
7- Reinvest the cash flow as it is generated—but always keep a liquid position.

These cardinal concepts have served me well over the years.

NEBRASKA POPULATION PROJECTIONS
1985-2020

The Bureau of Business Research has completed work on *Nebraska Population Projections, 1985-2020.* The volume contains population projections for counties by age and sex for the quinquennial years 1985, 1990, 1995, 2000, 2005, 2010, 2015, and 2020. Age and sex information is provided for the cohorts 0-4, 5-14, 15-24, 25-44, 45-64, and 65+. A special tabulation was made for the cohort 0-17.

Copies of the volume are available at $17.50 from the Bureau of Business Research, 200 CBA, University of Nebraska-Lincoln, Lincoln, NE 68588-0406. Checks should be made payable to Bureau of Business Research.

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

60 Years of Service

The Impact of the 1974-75 and the 1980-82 Recessions upon Employment in Nebraska

Undoubtedly, the 1980-82 recession will be associated with serious employment difficulties. The repercussions of this recession were registered in the number of business failures which occurred during the period. Dun and Bradstreet reported that the nation's number of business failures for the first half of 1982 was up 45 percent from 1981's first half. Fewer employment opportunities, augmented by the financial difficulties encountered by many businesses, resulted in circumstances not unlike those characteristic of the 1930s.

The employment crisis generated by the 1980-82 recession was national in scope. Fortunately, Nebraska's employment was not as severely afflicted as was the nation's. However, it cannot be said that the state escaped unscathed.

This article reviews the impact of the 1980-82 recession upon employment in Nebraska's major economic sectors. A more embracing inquiry is also provided by comparing and contrasting the employment status of the 1980-82 recession to the previous 1974-75 recession.

Because the adversity of the recession was not felt uniformly across the state (dissimilarities were noted among the regions and various industries), both state and metropolitan data are examined.

Two metropolitan areas are designated, namely, the standard metropolitan statistical area (SMSA) for Lincoln and for Omaha. Lincoln SMSA includes all of Lancaster County. Omaha SMSA is defined as Douglas and Sarpy Counties in Nebraska and Pottawattamie County in Iowa. The inclusion of Pottawattamie County was necessitated simply because comparable data for the Omaha area was otherwise unavailable.

All primary industries are included in the study, with the exception of farm, construction, and industries with fewer than 2,000 workers. Farm and construction were omitted because these industries have distinctive seasonal fluctuations which are captured in the data; hence, comparability is impaired. Industries focused include manufacturing; trade; services; finance, insurance, real estate; government; and transportation, communication, and utilities. Employment statistics were obtained from the Nebraska Department of Labor.

EMPLOYMENT STATUS IN NEBRASKA

The 1974-75 recession's impact on statewide employment was substantially different from the impact noted during the 1980-82 period. Nebraska was more fortunate in the earlier recession in that employment did not suffer as drastically. The information contained in Table I summarizes the statewide and metropolitan labor force characteristics for both the 1974-75 and 1980-82 recessionary periods.

According to the Department of Labor's definition, the civilian labor force consists of all employed persons sixteen years of age or older, plus all those unemployed but actively seeking work. Excluded from the labor force count are discouraged workers no longer actively seeking employment. The unemployment rate is the percentage of the civilian labor force not employed.

The state civilian labor force grew by 73,450 (or approximately eleven percent)—going from 668,300 during January 1974 to 741,750 during July 1975. Although the labor force grew during the subsequent 1980-82 recession, the increase was significantly less than that noted during the prior period. The labor force increased by 34,942 from January 1980 to October 1982, a 4.7 percent gain. This was less than one-half of that reported during the earlier period (Table I).

Both Lincoln and Omaha registered gains in labor force participation during 1974-75. However, neither metropolitan area's growth paralleled that achieved by the state. Lincoln's labor force expansion of 4.8 percent, an increase of 4,490, was considerably less than the state's 11 percent increase. Omaha reported only a

(continued on page 3)

TABLE 1
Nebraska Labor Force Characteristics

	Jan. '74	July '75	Jan.'80	Oct. '82
Civilian Labor Force				
Nebraska	668,300	741,750	738,848	773,790
Lincoln–SMSA	92,673	97,163	108,134	109,295
Omaha–SMSA	245,957	246,522	278,726	278,707
Farm Employment				
Nebraska	74,050	115,250	55,077	74,331
Lincoln–SMSA	2,293	3,502	1,601	2,125
Omaha–SMSA	3,884	5,601	2,548	3,375
Total Employment				
Nebraska	648,400	713,200	707,918	730,100
Lincoln–SMSA	90,676	93,878	104,395	103,951
Omaha–SMSA	236,792	232,737	264,115	258,796
Unemployment Rate				
Nebraska	3.0	3.8	4.2	5.6
Lincoln–SMSA	2.2	3.4	3.5	4.9
Omaha–SMSA	3.7	5.6	5.2	7.1

TABLE 2
Non-agricultural Wage and Salary Employment

	Nebraska (1976 Benchmark)			Nebraska (1981 Benchmark)		
	Jan. '74	July '75	Percent Change	Jan. '80	Oct. '82	Percent Change
Total Non-agricultural Wage and Salary	538,500	564,400	+4.8	623,508	611,278	−2.0
Manufacturing	91,200	84,100	−7.8	99,893	83,329	−16.6
Durable	48,900	41,000	−16.2	52,428	40,586	−22.6
Non-durable	42,300	43,100	+1.9	47,465	42,743	−10.0
Transportation, Communication, and Utility	38,900	39,100	+0.5	46,859	42,926	−8.4
Trade	138,600	144,800	+4.5	163,534	161,452	−1.3
Wholesale	38,300	40,600	+6.0	48,531	47,740	−1.6
Retail	100,300	104,200	+3.9	115,003	113,712	−1.1
Finance, Insurance, and Real Estate	32,600	34,900	+7.1	41,419	41,210	−0.5
Services (Except Domestic)	93,600	101,700	+8.7	113,739	123,651	+8.7
Government	118,200	128,200	+8.5	130,040	133,859	+2.9

	Lincoln–SMSA (1977 Benchmark)			Lincoln–SMSA (1981 Benchmark)		
	Jan. '74	July '75	Percent Change	Jan. '80	Oct. '82	Percent Change
Total Non-agricultural Wage and Salary	83,297	86,217	+3.5	98,780	97,530	−1.3
Manufacturing	13,227	12,446	−5.9	13,906	12,008	−13.6
Durable	5,527	5,216	−5.6	6,320	5,301	−16.1
Non-durable	7,700	7,230	−6.1	7,586	6,707	−11.6
Transportation, Communication, and Utility	5,513	5,550	+0.7	7,319	6,885	−5.9
Trade	17,526	17,888	+2.1	22,115	22,436	+1.5
Wholesale	3,540	3,825	+8.1	5,164	5,124	−0.8
Retail	13,986	14,063	+0.6	16,951	17,312	+2.1
Finance, Insurance, and Real Estate	5,690	5,943	+4.4	6,953	6,870	−1.2
Services (Except Domestic)	13,845	14,578	+5.3	17,044	17,497	+2.7
Government	23,894	24,881	+4.1	27,614	28,827	+4.4

	Omaha–SMSA (1976 Benchmark)			Omaha–SMSA (1981 Benchmark)		
	Jan. '74	July '75	Percent Change	Jan. '80	Oct. '82	Percent Change
Total Non-agricultural Wage and Salary	230,297	234,680	+1.9	264,613	258,023	−2.5
Manufacturing	39,469	31,862	−19.3	37,229	32,232	−13.4
Durable	20,496	16,127	−21.3	19,888	15,535	−21.9
Non-durable	18,973	15,735	−17.1	17,341	16,697	−3.7
Transportation, Communication, and Utility	21,452	21,159	−1.4	24,307	22,758	−6.4
Trade	59,029	60,350	+2.2	68,306	65,868	−3.6
Wholesale	17,848	18,536	+3.9	20,989	21,434	+2.1
Retail	41,181	41,814	+1.5	47,397	44,434	−6.3
Finance, Insurance, and Real Estate	18,173	19,444	+7.0	24,610	23,863	−3.0
Services (Except Domestic)	45,017	49,232	+9.4	57,782	61,164	+5.8
Government	36,357	41,343	+13.7	42,680	42,637	−0.1

(continued from page 1)

meager gain of 565 participants, or a 0.2 percent advance. This noticeable regional variation in labor force growth indicates that, for the 1974-75 recession, the non-metropolitan areas scarcely felt the recession.

For 1980-82, Lincoln's labor force realized a 1.1 percent increase of 1,161; again, this gain was notably below that of the state. As in the prior recession, Lincoln fared better than Omaha, which reported no growth in labor force. Omaha's labor force actually decreased by 19 workers during this period.

Total employment, farm and non-farm, for Nebraska grew roughly 9.9 percent during the 1974-75 time span—from 648,400 to 713,200. In sharp contrast, total employment for the 1980-82 period grew only 3.1 percent—from 707,918 to 730,100. Despite the longer time interval identified with the latter recession, employment growth was measured to be approximately three times greater during 1974-75 than during 1980-82.

It should be noted that much of the total employment gain recorded for both periods was attributed to gains in farm employment. The seasonal disturbances inherent in agricultural employment data, rather than economic growth, were markedly responsible for the seeming surge in employment for 1980-82. Increases in farm employment accounted for 87 percent of the state's 1980-82 total employment growth and for 64 percent of its 1974-75 growth.

Similar to the state, metropolitan area employment was more critically afflicted by the 1980-82 recession. However, a distinct departure exists in the magnitude of the impact upon metropolitan versus statewide employment.

Lincoln realized a total employment increase of 3,202—from 90,676 during January 1974 to 93,878 during July 1975. Of this increase, only 1,209 (or approximately one-half) of the addition was explained by farm employment. During 1980-82, the story for Lincoln was quite the contrary. During the latter period, Lincoln's total employment declined by 444; the 524 farm employment gain was more than offset by a 968 decline in all non-farm employment.

During 1974-75, Omaha responded to the recession in a fashion strikingly different from Lincoln and Nebraska. During this period, Omaha was the only area of the three to register a decrease in its number of employed. Omaha's total employment during 1974-75 declined by 4,055 workers, a negative 1.7 change during the period. A heavier loss of jobs was reported during the more recent recession; from January 1980 to October 1982, 5,319 jobs were lost—a two percent decline.

Omaha's non-farm employment also fell in both recessions. However, the rate of decline in non-farm jobs was actually less serious during the 1980-82 recession than during the earlier recession. In this respect, Omaha's response to recessionary pressure was again atypical of that noted for either the Lincoln or Nebraska economy. When non-agricultural job loss is measured by percentage rate, the erosion of non-farm job opportunities was more serious for Lincoln and the state during the 1980-82 recession; the opposite was true for Omaha. Employment in Omaha's non-farm industries declined 2.6 percent during 1974-75, while, during 1980-82, the rate of decline was slightly less—approximately 2.4 percent.

The unemployment rate is commonly referenced by economists and the media as a job-market barometer. A review of the unemployment rate for Nebraska and its metropolitan centers reconfirms that joblessness was more prevalent for the 1980-82 recession.

The unemployment rate figures indicated in Table I reveal a distinct pattern. Regardless of whether this pattern is attributed to factors peculiar to these two recessionary periods, two definite relationships are evident. For both time spans investigated, the Lincoln unemployment rate was held below that of the state, while the Omaha rate successively exceeded that of the state. To a great extent, Lincoln's lower unemployment rate can be credited to its industrial composition.

In comparison to the Nebraska and Omaha economies, Lincoln's government sector employs a proportionately greater number of the non-farm wage and salary workers. Government employment accounts for roughly thirty percent of the non-agricultural wage and salary jobs for Lincoln, 17 percent for Omaha, and 22 percent for the state. The fact that government is more heavily represented in the Lincoln economy—plus the fact government was one of the state's few economic sectors to realize employment growth for 1980-82—explains why the recession's impact on the Lincoln economy was cushioned, to a certain degree.

A substantial number of the state's non-agricultural wage and salary jobs are found in the metropolitan area. In general, 50 to 75 percent of the available jobs in primary industry are located in Nebraska's two major urban outlets. Because the combined Lincoln and Omaha industries constitute such a large proportion of Nebraska's commercial employment, there may be a clear divergence in the recessionary impact upon metropolitan versus statewide employment. Moreover, the employment levels for Lincoln and Omaha tend to respond differently to economic influences, due to the industrial composition uniquely identified with each city.

When comparing the impact of the two recessions upon Lincoln's, Nebraska's, and Omaha's employment, it is clear that a significant change-about occurred. By scanning the total non-agricultural wage and salary employment figures tabulated in Table 2, it is apparent that all three areas lost jobs during 1980-82, while, during 1974-75, non-agricultural employment for each area increased.

A closer inspection of the percent change columns under the Nebraska section in Table 2 reveals three distinctive relationships. During 1974-75, manufacturing was the only primary industrial sector to register an employment decline. During the 1980-82 recession, the manufacturing sector not only registered the largest percentage decrease in jobs, but this employment decline was also more drastic than that recorded for the prior recession. The non-durable goods sub-category of manufacturing actually gained employment during 1974-75. This contrasts to 1980-82, when a considerable number of jobs was lost. The durable goods sub-category also realized a large decrease in employment during the latter period. In addition, of all the primary industrial sectors listed, only two—government and services—realized employment growth during 1980-82.

Some of the same problems associated with statewide manufacturing employment also showed up in Lincoln. Manufacturing, including both durable and non-durable divisions, was the only major non-farm industry in Lincoln to lose jobs during 1974-75. Looking at the 1980-82 recession, manufacturing, along with several of Lincoln's primary industries (e.g., wholesale trade; transportation, communication, and utility; finance, insurance, and real

(continued on page 6)

Review and Outlook

Nebraska's net physical volume output index increased 4.3 percent October-November 1982, the largest monthly gain recorded in several months. A substantial increase in the marketing of agricultural commodities was responsible for approximately two-thirds of the increase in the index, but it is important to note that the non-agricultural component of the index was up a more modest 1.3 percent.

The agricultural component of the index recorded a 33.5 percent increase on a month-to-month basis. Marketing of agricultural commodities in November amounted to $767.7 million. When corrected for seasonal variations, marketings totaled $586.5 million—up 47.2 percent above the October level—an unusually large month-to-month increase. On a year-to-date basis, Nebraska cash farm marketings were down 6.2 percent; nationally, they were up 8.2 percent.

Agricultural prices received by Nebraska farmers and ranchers increased 2.2 percent on a month-to-month basis. Despite this monthly increase, prices received for Nebraska agricultural products in November 1982 were 2.9 percent below November 1981.

As noted above, the non-agricultural component of the index increased 1.3 percent October-November 1982. The construction component recorded a decline of 1.5 percent, while the manufacturing component of the index declined 0.1 percent. Distributive trade recorded a 2.2 percent in-

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

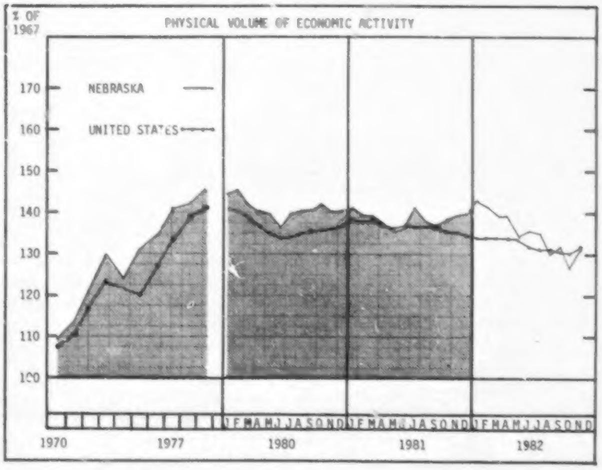
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

November, 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	101.2	101.7	102.5	102.2
Agricultural	76.0	108.9	115.9	102.7
Nonagricultural	105.0	101.5	100.7	102.2
Construction	93.3	103.1	75.7	94.7
Manufacturing	83.8	90.1	87.5	92.5
Distributive	108.9	105.4	104.3	105.9
Government	121.6	105.6	110.7	108.5
Physical Volume	95.4	97.6	98.0	96.8
Agricultural	78.3	109.4	120.8	106.7
Nonagricultural	98.2	97.2	95.0	96.5
Construction	91.1	100.7	73.8	92.4
Manufacturing	82.1	88.8	85.7	90.3
Distributive	104.1	100.8	98.0	99.5
Government	100.0	98.9	101.4	98.4

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	366.6	365.6
Agricultural	278.3	383.0
Nonagricultural	379.8	365.1
Construction	207.1	315.8
Manufacturing	307.1	278.7
Distributive	414.9	414.5
Government	416.2	378.6
Physical Volume	131.9	132.2
Agricultural	117.4	159.6
Nonagricultural	134.0	131.3
Construction	61.7	94.0
Manufacturing	127.7	131.1
Distributive	141.3	141.2
Government	146.5	146.4

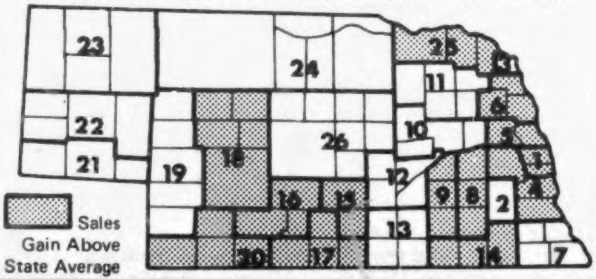


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Nov. 1982 as percent of Nov. 1981	Nov. 1982 as percent of Nov. 1981	Year to date '82 as percent of Year to date '81
The State	89.5	93.7	94.1
1 Omaha	86.5	91.2	95.8
Bellevue	79.3		
2 Lincoln	89.9	94.5	94.0
3 So. Sioux City	80.4	96.8	90.5
4 Nebraska City	94.4	100.4	96.0
5 Fremont	83.1	94.4	94.9
Blair	100.1		
6 West Point	104.4	114.9	100.9
7 Falls City	89.3	101.4	94.6
8 Seward	100.1	105.3	96.0
9 York	88.9	93.2	95.8
10 Columbus	78.8	90.5	92.5
11 Norfolk	89.5	100.5	94.0
Wayne	114.1		
12 Grand Island	94.2	99.1	93.2
13 Hastings	88.3	93.6	90.9
14 Beatrice	81.8	97.0	95.6
Fairbury	107.6		
15 Kearney	94.4	103.7	97.4
16 Lexington	98.9	102.8	97.5
17 Holdrege	105.8	109.5	98.3
18 North Platte	98.1	104.0	94.6
19 Ogallala	98.6	103.3	93.1
20 McCook	108.7	110.5	99.2
21 Sidney	88.1	90.3	91.9
Kimball	81.1		
22 Scottsbluff/Gering	77.1	85.7	89.4
23 Alliance	91.3	97.8	89.5
Chadron	87.5		
24 O'Neill	103.6	108.9	91.6
25 Hartington	113.2	110.0	97.0
26 Broken Bow	87.1	104.9	92.2

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Regionl totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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crease; the government component of the index slipped a slight 0.1 percent.

Nebraska retail sales were down 2.7 percent in November 1982, compared with November 1981. Taxable retail sales totaled $730 million in November 1982, compared with $751 million one year previous. When adjusted for price changes, total retail sales were down 6.3 percent on a year-to-year basis. Price adjusted retail sales were corrected using the commodity component of the consumer price index which, during the past year, increased 3.8 percent.

Non-motor vehicle retail sales were down 10.5 percent on a price adjusted basis in November 1982, compared with one year previous. November 1982 sales were $647 million, compared with $697 million in November 1981.

Motor vehicle sales were up a substantial 48.6 percent on a price adjusted basis in November 1982, compared with one year previous. Motor vehicle sales totaled nearly $82.9 million for the month, compared with $53.7 million one year ago.

Retail sales showed real gains after adjustment for price increases at Hartington, O'Neill, McCook, Holdrege, Fairbury, Wayne Seward, West Point, and Blair. Wayne recorded the largest percentage increase in retail sales in November 1982, when compared with one year ago, with an increase of 14.1 percent. Hartington recorded a large gain in real retail sales during the same interval: 13.2 percent.

Fairbury and Nebraska City led Nebraska communities with gains in their respective city business indexes. A number of other communities recorded declines smaller than the state average of 6.2 percent, but, nevertheless, showed a decline in economic activity.

Nationally, there are a number of encouraging signs that the recession is over or nearly over. The composite series of leading economic indicators has recorded gains in eight out of the last nine months. These indicators usually turn before the economy changes directions. Interest rates are down; automobile sales are up, along with the sales of other durable goods; and housing starts have picked up—classic signs of an economic recovery.

For Nebraska and other states, data is not as readily available and as current as it is nationally. Information is compiled at the national level and then disaggregated to the state level with a concomitant time lag in available data. Recovery in Nebraska is expected to develop more slowly than nationally because of the depressed state of commodity prices and a rather large grain surplus.

D.E.P.

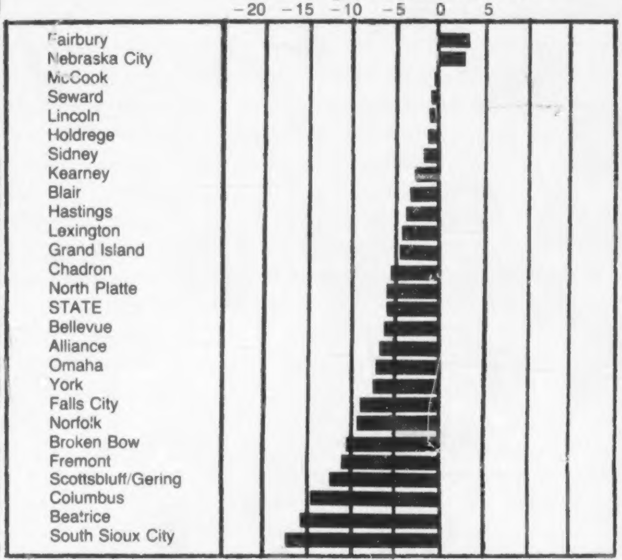
5. PRICE INDEXES

November, 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	293.6	104.6	106.4
Commodity component	267.8	103.8	104.1
Wholesale Prices	300.4	101.7	102.7
Agricultural Prices			
United States	240.0	99.6	96.1
Nebraska	237.0	97.1	95.4

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEX

Percent Change Nov. 1981 to Nov. 1982



Source: Table 3 (page 4) and Table 4 below.

4. CITY BUSINESS INDICATORS

The State and Its Trading Centers	Employment[1]	Building Activity[2]	Power Consumption[3]
	Percent of Same Month a Year Ago		
The State	96.9	97.6	105.5
Alliance	92.6	96.3	101.8
Beatrice	97.8	27.4	105.6
Bellevue	98.5	199.3	101.1
Blair	97.0	61.2	93.6*
Broken Bow	98.9	45.2	105.2
Chadron	99.9	106.5	120.1
Columbus	91.0	73.9	115.3
Fairbury	98.7	116.7	106.3
Falls City	99.7	41.9	89.8
Fremont	96.3	69.7	82.3*
Grand Island	94.3	105.0	104.3
Hastings	98.7	135.8	94.1
Holdrege	97.1	58.7	99.8
Kearney	98.7	96.4	104.2
Lexington	94.2	70.1	77.4
Lincoln	98.2	234.0	107.6
McCook	92.7	83.4	105.9
Nebraska City	97.5	380.7	91.1
Norfolk	95.2	53.3	99.3
North Platte	91.2	74.8	102.5
Omaha	98.5	83.5	108.9
Scottsbluff/Gering	98.5	78.8	124.3
Seward	100.2	79.8	106.1
Sidney	100.5	197.8	118.3
So. Sioux City	99.2	18.5	96.4
York	96.2	79.4	105.9

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

estate), experienced job cutbacks. Note that manufacturing employment suffered a more severe job loss during the recent recession—a 13.6 percent decline during 1980-82, in contrast to the more moderate decline of 5.9 percent during 1974-75.

Omaha's manufacturing employment responded differently from Lincoln's and the state's. Manufacturing registered a 19.3 percent decline for the 1974-75 recession, while an employment decrease of 13.4 percent was recorded for 1980-82. In addition, Omaha's non-durable goods industries' employment drop was not only less precipitous during the 1980-82 recession—a 17.1 percent decline during 1974-75, as opposed to a 3.7 percent decline during 1980-82—but its percentage decrease was considerably smaller than that recorded for Lincoln or for the entire state. This can be attributed mainly to the fact Omaha's economy does not possess as heavy a representation of food and kindred products industry as does the state. Nebraska's meatpacking industry was impacted especially hard during 1980-82.

On a statewide basis, three major industries—transportation, communication, and utility; trade; finance, insurance, and real estate—had like reactions for both recessions: during 1974-75, each industry realized employment expansion; during 1980-82, each industry realized job losses. During the recent recession, the trade sector fared surprisingly better in Lincoln than it did in either Omaha or the state. Lincoln was the only area to register an employment increase in its trade industry for 1980-82: a gain of 1.5 percent, contrasted to a −3.6 percent for Omaha and a 1.3 percent loss statewide. Like Nebraska, Lincoln and Omaha lost a considerable number of jobs in both the transportaion, communication, and utility and finance, insurance, and real estate industries during 1980-82. It can be noted that, for the latter industry, the state lost proportionately fewer jobs. The sharp employment decreases recorded in the transportation sector for all three areas during the current recession reflect the general slowdown in the economy, and it may reflect the fact that the strength of the western energy boom has become far weaker than was the case for the earlier period.

Government was the only other primary sector besides service that attained statewide employment growth during the 1980-82 term. The expansion rate in government jobs at state level differed considerably between the 1974-75 recession and the 1980-82 recession. This difference is a differential of nearly three to one when percentage rates are calculated—an 8.5 percent gain in 1974-75, as opposed to a 2.9 percent advance during 1980-82. Lincoln's number of government jobs also increased during the recent recession, while, in marked contrast, Omaha's government sector registered a modest decline of 0.1 percent.

Services was one of the state's few industries to achieve employment growth during both recessions. Unlike any of the other primary industries, service employment continued to increase during the 1980-82 recession—not only at the state level, but in Lincoln and Omaha as well. Of the Nebraska service industries, business service and health service enjoyed rather significant growth, with business service achieving a 17.9 percent increase between January 1980 and October 1982 and health service a 9.5 percent increase during that same period.

CONCLUSION

In comparing the two recessions, it is evident that a greater blow was dealt to the Nebraska job market during the 1980-82 recession than during the 1974-75 recession. The state's civilian labor force and total employment experienced rather remarkable growth during 1974-75, considering the nation was firmly in a recession. Nebraskans were not as lucky during the more recent recession: the state unemployment rate was significantly higher during 1980-82 than during 1974-75; civilian labor force and total unemployment grew only moderately during the entire 33-month span; and, completely contrary to the prior recession, Nebraska's total non-farm wage and salary employment decreased during 1980-82.

In terms of statewide non-farm wage and salary employment, the negative repercussions of the 1974-75 recession were limited to the manufacturing sector. As in the former recession, manufacturing industries lost a substantial number of jobs during 1980-82: a more drastic drop-off was noted during the latter period, with a particularly large decrease in the non-durable goods division. All other primary non-agricultural industries located within the state, with the exception of services and government, also realized job reductions during the 1980-82 recession.

Vicki J. Brickner

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Business in Nebraska

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College of Business Administration

60 Years of Service

NEBRASKA FARM INCOME, 1950-1981

The Economic Research Service (ERS) of the U.S. Department of Agriculture annually publishes estimates of farm income. These farm income estimates are composed of three major series: total gross farm income, net farm income before inventory adjustment, and net farm income after inventory adjustment. Depending on the choice of the income measure used, different pictures of the economic well-being of the farm sector emerge. Table 1 (page 2) and Figure 1 (page 3) present the various measures of income for the years 1950 to 1981 and illustrate the differences in the three measures.

The data show that the income of Nebraska's farmers in 1981 was either $6,860.2 million, $283.9 million, or $985.8 million; this income represented either a 0.2 percent decrease, a 59.9 percent decrease, or a 250.1 percent increase from 1980. It should be evident, then, that a careful definition of each measure is necessary to ensure that the appropriate picture of the farm economy is conveyed.

ERS defines total gross farm income as cash receipts from farm marketings, government payments, nonmoney income (the imputed value of home consumption of farm products and the imputed gross rental value of farm dwellings), and other farm income (payments for such items as recreational services and custom work and other agricultural services). Net farm income before inventory adjustment consists of gross farm income less farm production expenses. Net farm income after inventory adjustment is net farm income before inventory adjustment, with allowances for changes in farm inventories. Farm inventories are valued at an annual average of the relevant prices. To summarize, both gross farm income and net farm income before inventory adjustment are measures of income (in money or in kind) that is actually received or realized during a given year. Net farm income after inventory adjustment, on the other hand, measures income produced or earned during a given year and is more of a value-added concept. For the sake of simplicity, income measures, from here on, will be referred to as realized gross farm income, realized net farm income, and total net farm income.

The data in Table 1 show that 1981 was not a good year for agriculture in Nebraska. Although realized gross farm income was only slightly lower than the previous year's record level, realized net farm income of $283.9 million was at its lowest level since 1962, when it was $270.1 million. During that twenty-year period, realized gross income increased 4.8 times, but production expenses grew much faster (5.7 times). In other words, in 1981 it took more than five times the realized gross income to produce the same realized net income. During that same time, the purchasing power of that income--as measured by change in the personal consumption expenditures deflator--dropped by nearly two-thirds.

It should also be noted that without the imputed nonmoney income, realized net income would have been negative. That is, the sum of cash receipts, government payments, and other farm income totalled $6,554.6 million. This sum, however, was $21.6 million less than production expenses. Although production expenses are deductions from farm income, it should be remembered that they do represent incomes to the suppliers of those items.

A much different picture emerges if total net farm income is focused. In 1981, this income amounted to $985.8 million--the highest income since 1975 and the third highest on record. The difference between realized net income and total net income was the addition of a record $701.8 million in inventories. Although this income was not actually received by Nebraska farmers, it represented production in 1981 that could have been sold. The meaning of this measure of income is important to understand because it is the measure of income used by the Bureau of Economic Analysis in estimating personal income for the state.

Table 1 and Figure 1 also show the similarities and differences in the patterns of change of the three income measures. All three measures exhibited remarkably similar trends until 1971. They all showed weakness during the 1950s, with declines or very small increases. During the 1960s, realized gross income experienced a rather steady growth. During this same time period, both realized net farm income, and total net farm income began to recover from their losses of the 1950s, with mostly minor year-to-year fluctuations. They ended the decade at levels comparable to those of twenty years earlier.

During the 1970s, the primary characteristic that emerges is one of volatility and erratic year-to-year changes. Realized gross farm income increased rapidly until 1973, when it leveled off until 1978 when another growth spurt began. Because production expenses grew at a much more steady rate, realized net farm income showed large fluctuations. As a result of the rapid growth of marketings during the early 1970s, realized net farm income peaked in 1973--with 1972 and 1974 also being exceptional years. Then, as production expenses outpaced gross income, realized net income fell, reaching a decade low in 1977. After this low, realized net income began to recover until 1981, when it recorded its most severe decline since this analysis began in 1950.

(continued on page 3)

Table 1

GROSS AND NET INCOME FROM FARMING: 1950-1981

	Gross Farm Income								
Year	Cash Receipts from Farm Marketings	Government Payments	Nonmoney Income	Other Farm Income	Total	Farm Production Expenses	Net Farm Income Before Inventory Adjustment	Net Change in Farm Inventories	Net Farm Income After Inventory Adjustment
					Millions of Dollars				
1950	1009.6	8.8	63.5	.7	1082.5	708.6	373.9	156.6	530.5
1955	1017.7	7.7	60.4	3.9	1089.7	747.9	341.8	-140.4	201.4
1960	1188.0	22.1	56.1	7.3	1273.5	990.3	283.2	45.5	328.6
1965	1343.2	184.7	73.1	11.6	1612.6	1296.2	316.4	105.2	421.5
1970	2124.4	203.0	77.1	19.1	2423.6	1903.1	520.5	-57.7	462.8
1971	2285.8	171.0	74.7	22.6	2554.1	2041.7	512.4	90.3	602.8
1972	2821.4	233.3	82.8	23.9	3161.3	2516.9	644.4	79.4	723.8
1973	3943.3	151.8	98.3	30.5	4224.0	3290.9	933.1	312.8	1246.0
1974	4107.4	21.0	113.4	31.9	4273.6	3098.6	1175.1	-569.2	605.8
1975	3860.1	71.7	128.3	38.6	4098.7	3283.3	860.4	131.3	991.7
1976	3841.0	36.6	154.8	40.0	4072.4	3624.7	447.4	-25.9	421.9
1977	3975.0	92.9	181.0	45.7	4294.7	4005.6	289.0	76.2	365.2
1978	4679.9	268.6	185.3	49.0	5182.9	4635.6	547.3	181.5	728.8
1979	5918.9	132.7	236.2	61.9	6349.7	5659.3	690.4	292.5	982.9
1980	6466.5	82.9	262.9	61.8	6874.1	6166.4	707.7	-426.[illegible]	281.6
1981	6376.0	101.0	305.5	77.6	6860.2	6576.2	283.9	701.8	985.8
					Percentage Change from Previous Period				
1950	---------	---------	---------	---------	---------	---------	---------		---------
1955	0.8	-12.5	-4.9	457.1	0.7	5.5	-8.6		-62.0
1960	16.7	187.0	-7.1	87.2	16.9	32.4	-17.1		63.2
1965	13.1	735.7	30.3	58.9	26.6	30.9	11.7		28.3
1970	---------	---------	---------	---------	---------	---------	---------		---------
1971	+7.6	-15.8	-3.1	18.3	5.4	7.3	-1.6		30.3
1972	23.4	36.4	10.8	5.8	23.8	23.3	25.8		20.1
1973	39.8	-34.9	18.7	27.6	33.6	30.8	44.8		72.1
1974	4.2	-86.2	15.4	4.6	1.2	-5.8	25.9		-51.4
1975	-6.0	241.4	13.1	21.0	-4.1	6.0	-26.8		63.7
1976	-0.5	-49.0	120.7	3.6	-0.6	10.4	-48.0		-57.5
1977	3.5	153.8	16.9	14.3	5.5	10.5	-35.4		-13.4
1978	17.7	189.1	2.4	7.2	20.7	15.7	89.4		99.6
1979	26.5	-50.6	27.5	26.3	22.5	22.1	26.1		34.9
1980	9.3	-37.5	11.3	-0.2	8.3	9.0	2.5		-71.4
1981	-1.4	21.8	16.2	25.6	-0.2	6.6	-59.9		250.1
1965-1970	58.2	9.9	5.5	64.7	50.3	46.8	64.5		9.8
1970-1975	81.7	-64.7	66.4	102.1	69.1	70.2	65.3		114.3
1975-1980	67.5	15.6	104.9	60.1	67.7	87.8	-17.7		-71.6

Source: U.S. Department of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics, 1981*

(continued from page 1)

Total net farm income also exhibited similar volatility, but the pattern was slightly different. Total net income peaked in 1973 at $1,246.0 million. Other good years were 1975 ($991.7 million), 1979 ($982.9 million), and 1981 ($985.9 million).

The data in Table 2 also indicate that, although the situation in 1981 may have been an extreme case, the existence of three relatively different rates of change is not uncommon. There were similar occurrences during 1974 and 1975, for example.

It is interesting to note the way in which farm income has been affected during the previous two recessions. In previous articles in *Business in Nebraska,* it has been stated that employment in Nebraska fared worse during the 1980-1982 recession than during the 1974-1975 recession. Because of the different measures and fluctuations, in farm income, the evidence is somewhat unclear. Realized net farm income reached a record peak in 1974 and then fell to near record levels in 1975. It also reached a five-year peak low in 1981. Total net farm income grew between 1980 and 1981 --just as it did between 1974 and 1975, although the growth during the later period was much larger. Comparing average incomes gives a somewhat clearer picture. Average realized net farm income fell by 51.3 percent between 1974-1975 and 1980-1981, and total net farm income fell 20.7 percent during this same period. It appears, then, that farm income has been more adversely affected by the 1980-1981 recession.

Table 2 presents the ERS farm income data on a per farm basis. Compared to the data in Table 1, the year-to-year percentage changes are larger because the number of farms has consistently decreased from year to year. Therefore, the realized net farm income for 1981 was 43 percent higher than 1960 on a per farm basis, even though it was unchanged in total.

The data indicate that, in 1981, a realized gross income of $105,541 was needed to generate a realized net income of $4,368 --a ratio of more than 24 to 1. Ten years earlier, in 1971, that ratio was 5 to 1, and it was less than 3 to 1 in 1950.

Given the problems of volatility and the wide discrepancies among alternative measures of farm income, there is considerable opportunity for disagreement concerning the economic well-being of the agricultural sector. In addition, farm income is more difficult to measure than other kinds of income which consist mainly of wages and salaries. Estimates of the individual components of sales and expenses are made using data from a variety of sources. Most of the estimates of cash receipts are obtained from state data relating to production, prices, and disposition of farm output. On the other hand, data for many expense items are not regularly collected; therefore, census and survey data and indirect data are used to generate estimates of production expenses. Because of this, recent estimates of farm income are subject to considerable revisions.

Given the previous problems, it is extremely important to exercise care in the selection and use of the available farm income measures used in economic analysis. Consequently, in any analysis which uses farm income data, the most recent revision should be used, the measure which best fits the situation should be selected, and some mention of the problems and limitations inherent in the use of farm income data should be included. Moreover, it should be recognized that no single year or year-to-year change is likely to be an accurate indicator of the farm income siutation in Nebraska.

J.A.D.

Table 2

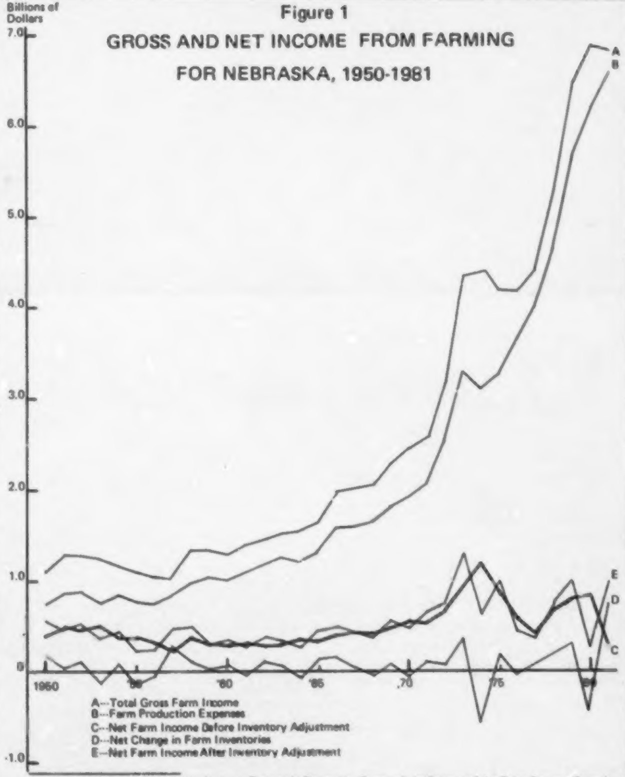
GROSS AND NET FARM INCOME PER NEBRASKA FARM, 1950-1981

Year	Gross Farm Income	Percentage Change	Net Farm Income Before Inventory Adjustment	Percentage Change	Net Farm Income After Inventory Adjustment	Percentage Change
1950	9,931	———	3,431	———	4,867	———
1955	10,683	7.6	3,351	-2.3	1,975	-59.4
1960	13,693	28.2	3,045	-9.1	3,534	78.9
1965	19,666	43.6	3,858	26.7	5,141	45.5
1970	33,200	———	7,130	———	6,340	———
1971	35,474	6.8	7,117	-0.2	8,372	32.1
1972	44,526	25.5	9,076	27.5	10,195	21.8
1973	60,343	35.5	13,331	46.9	17,800	74.6
1974	61,052	1.2	16,787	25.9	8,654	-51.4
1975	61,175	0.2	12,842	-23.5	14,802	71.0
1976	60,782	-0.6	6,683	-48.0	6,297	-57.5
1977	65,070	7.1	4,379	-34.5	5,533	-12.1
1978	78,528	20.7	8,293	89.4	11,043	99.6
1979	97,688	24.4	10,622	28.1	15,122	36.9
1980	105,755	8.3	10,887	2.5	4,332	-71.4
1981	105,541	-0.2	4,368	-59.9	15,166	250.1
1965-70	———	68.8	———	84.8	———	23.3
1970-75	———	84.3	———	80.1	———	133.5
1975-80	———	72.9	———	-15.2	———	-70.7

Source: U.S. Department of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics, 1981*

Figure 1

GROSS AND NET INCOME FROM FARMING FOR NEBRASKA, 1950-1981



Source: U.S. Department of Agriculture, Economic Research, *Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics, 1981*

Review and Outlook

Nebraska's net physical volume output increased 3.1% November-December 1982, according to the College of Business Administration's Bureau of Business Research. The index was heavily influenced by the agricultural component, which advanced 28.2% on a month-to-month basis. In contrast, the nonagricultural component of the index decreased 0.3%.

Nebraska cash farm marketings were $802 million in December 1982--up $73 million on a month-to-month basis (seasonally adjusted), or 11%. On a year-to-year basis, cash farm marketings were nearly $99 million higher than a year ago.

The nonagricultural segment of the state's economy recorded a small 0.3% decline November-December 1982. Construction output, as measured by the Bureau of Business Research's index, declined 1.8% November-December 1982. The construction component of the index stood at 60.6 December 1982 (1967=100). One year ago, the construction component of the index was at 67.8.

The manufacturing sector of the Bureau of Business Research's net physical volume index declined 1.5% November-December 1982. It now stands at 125.8 (1967=100), its lowest reading in more than three years. The manufacturing component of the index in December 1981 was 146.8, compared with 161.7 in December 1980. The decline in output in Nebraska's manufacturing sector has been particularly steep since April 1982--reflecting, in part, difficulties facing the region's food processing industry.

The distributive trade sector recorded a 0.3% increase in out-

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

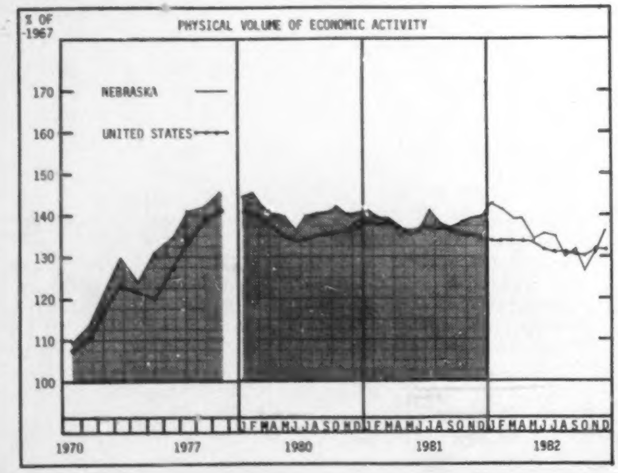
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

December 1982	Current Month as Percent of Same Month Previous Year		1982 Year to Date as Percent of 1981 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.1	102.1	102.4	102.2
Agricultural	95.8	108.0	113.9	103.2
Nonagricultural	103.1	101.9	100.9	102.2
Construction	92.1	102.6	76.8	95.3
Manufacturing	87.4	90.6	87.5	92.4
Distributive	108.0	105.8	104.6	105.9
Government	104.2	105.8	110.2	108.2
Physical Volume	98.5	98.3	98.0	96.9
Agricultural	95.8	108.9	118.2	107.0
Nonagricultural	99.0	97.9	95.3	96.6
Construction	89.4	99.6	74.9	92.9
Manufacturing	85.7	89.3	85.7	90.2
Distributive	104.0	101.9	98.5	99.7
Government	98.9	98.9	101.2	98.4

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	375.7	365.5
Agricultural	356.7	376.7
Nonagricultural	378.4	365.1
Construction	206.5	312.5
Manufacturing	302.8	276.2
Distributive	414.8	415.0
Government	413.4	380.7
Physical Volume	136.0	132.3
Agricultural	150.5	160.3
Nonagricultural	133.7	131.4
Construction	60.6	91.6
Manufacturing	125.8	112.0
Distributive	141.8	142.2
Government	144.9	146.4



3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

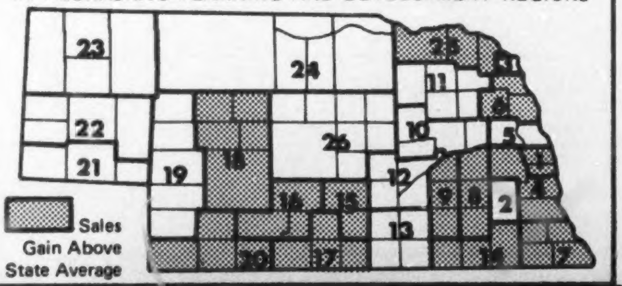
Region Number[1] and City	City Sales[2]	Sales in Region[2]	
	Dec. 1982 as percent of Dec. 1981	Dec. 1982 as percent of Dec. 1981	Year-to-date'82 as percent of Year-to-date'81
The State	90.6	93.6	94.0
1 Omaha	86.3	89.9	95.2
Bellevue	83.6		
2 Lincoln	97.3	101.2	94.6
3 So. Sioux City	75.6	87.5	90.2
4 Nebraska City	97.7	106.1	96.9
5 Fremont	86.6	91.9	94.5
Blair	97.5		
6 West Point	94.7	102.4	101.1
7 Falls City	100.1	106.8	95.8
8 Seward	106.2	109.7	97.3
9 York	93.9	105.1	96.7
10 Columbus	102.7	107.6	93.9
11 Norfolk	89.5	97.2	94.3
Wayne	100.3		
12 Grand Island	87.9	94.4	93.4
13 Hastings	95.5	102.2	92.0
14 Beatrice	97.7	107.6	96.7
Fairbury	120.6		
15 Kearney	100.2	105.1	98.1
16 Lexington	94.8	100.5	97.8
17 Holdrege	96.7	100.6	98.5
18 North Platte	95.9	99.7	95.1
19 Ogallala	103.6	98.7	93.6
20 McCook	97.2	102.4	99.5
21 Sidney	93.5	91.7	91.9
Kimball	81.9		
22 Scottsbluff/Gering	79.2	85.2	89.0
23 Alliance	88.4	95.1	90.0
Chadron	91.7		
24 O'Neill	103.0	107.7	93.0
25 Hartington	123.4	123.9	99.5
26 Broken Bow	102.1	105.6	93.4

[1] See region map below.

[2] Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales; city totals exclude motor vehicle sales.

Compiled from data provided by Nebraska Department of Revenue.

1982 YEAR TO DATE AS PERCENT OF 1981 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4)

put. This component of the state's economy is one of the few which increased in 1982. It was 141.8 in December 1982, compared with 136.4 in December 1981.

Nebraska retail sales declined 3.1% in December 1982, compared with December 1981. When adjusted for price changes, real retail sales were down 6.4% in December 1982 when compared with one year previous. The deflator applied was the commodity component of the Consumer Price Index, which increased 3.6% on a year-to-year basis.

On a month-to-month basis, the decline in retail sales in December 1982 was led by a decrease in nonmotor vehicle sales. This component of retail sales was down 6.1%, the eighth consecutive monthly decline in nonmotor vehicle sales. Dollar volume nonmotor vehicle sales was $847 million in December 1982, compared with $902 million in December 1981.

Motor vehicle sales, on the other hand, increased 47% in December 1982, compared with a year ago. When adjusted for price changes, motor vehicle sales were up 41.5%. December motor vehicle sales were $82 million, compared with $55 million in December 1981.

For 1982, motor vehicle sales in Nebraska totaled $942 million, compared with $844 million in 1981--a gain of 11.6%. Nonmotor vehicle sales totaled $8,318 million in 1982, compared with $8,621 million in 1981--a decline of slightly more than $300 million in dollar volume retail sales.

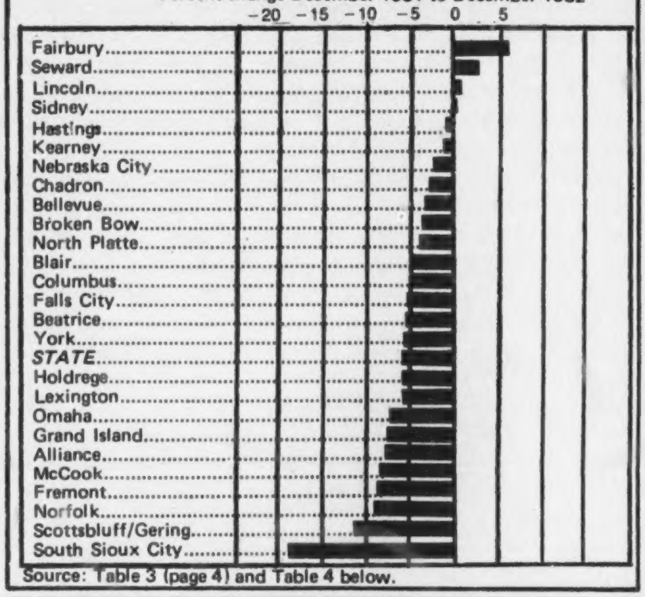
Communities recording gains in real retail sales include Hartington, +23.4% (see Table 3); Fairbury, +20.6%; Seward, +5.2%; Ogallala, +3.6%; O'Neill, +3.0%; Columbus, +2.7%; Broken Bow, +2.1%; Wayne, +0.3%; Kearney, +0.2%; and Falls City, +0.1%.

Only four communities recorded an improvement in their respective city business indexes in December 1982, compared with December 1981. Fairbury led all Nebraska communities with a 6.2% increase in its city business index, followed by Seward, +2.3%; Lincoln, +0.6%; and Sidney, +0.2%. For the state, the average community recorded a 5.6% decrease in December 1982, compared with one year previous.

Information through December 1982 provides scant evidence of any recovery in Nebraska. Nonmotor vehicle retail sales in December 1982 lack the vigor associated with a strong recovery. It now appears that a sustained recovery is underway nationally--one which should last 18 months or longer. Nebraska should realize some of the benefits from this economic expansion, and real output is expected to increase in the state in 1983. At this point, however, it appears Nebraska's gains are likely to be less robust than nationally.

D.E.P.

CITY BUSINESS INDEX
Percent change December 1981 to December 1982



Source: Table 3 (page 4) and Table 4 below.

5. PRICE INDEXES

December 1982	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	292.4	103.9	106.2
Commodity component	267.7	103.6	104.0
Wholesale Prices	300.6	101.6	102.6
Agricultural Prices			
United States	235.0	99.2	96.3
Nebraska	237.0	100.0	95.8

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

4. DECEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	97.0	98.9	95.8
Alliance	93.8	89.2	107.2
Beatrice	98.8	46.9	94.2
Bellevue	99.2	240.7	105.1
Blair	96.9	59.2	112.5*
Broken Bow	98.6	44.0	107.6
Chadron	99.5	124.3	101.8
Columbus	90.6	65.5	98.4
Fairbury	98.0	65.8	90.3
Falls City	99.9	34.9	88.0
Fremont	95.9	84.5	68.9*
Grand Island	94.6	114.9	96.0
Hastings	98.3	147.3	96.4
Holdrege	96.9	56.9	93.2
Kearney	97.1	93.7	101.2
Lexington	94.0	87.7	84.7
Lincoln	96.6	198.4	99.3
McCook	90.7	62.4	104.5
Nebraska City	96.5	98.5	97.7
Norfolk	94.3	67.0	96.9
North Platte	97.6	78.0	103.8
Omaha	99.2	90.9	95.2
Scottsbluff/Gering	98.3	76.8	87.4
Seward	99.7	102.3	90.9
Sidney	100.0	187.8	108.0
So. Sioux City	100.0	20.2	96.5
York	96.5	77.6	101.7

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

REVISED INCOME DATA FROM THE 1980 CENSUS

In February 1983, the U.S. Census Bureau released corrected income and poverty status information for Nebraska. The corrections were necessary because errors were detected in the coding of income responses made on the 1980 census questionnaires. The errors were discovered when it was observed that incomes in certain areas were much higher than expected.

The revisions were minor for the state as a whole, as only 257 cases were affected. This represented 0.06 percent of all cases. The changes, however, were not random, and some counties and communities were affected dramatically. In all, revisions were made in 13 of the state's counties for at least some of the income-related tables. Those counties and the number of changed cases were Boyd (2), Brown (19), Chase (4), Custer (48), Deuel (24), Furnas (28), Garden (1), Hall (3), Lancaster (1), Lincoln (46), Platte (13), Scotts Bluff (67), and Sheridan (1).

The Census Bureau has released a revised Summary Tape File 3 for the state and plans to prepare a set of tabulations showing corrected per capita income figures contained in *Summary Characteristics for Standard Metropolitan Statistical Areas and Governmental Units* (PHC80-3-29). All future 1980 census data products which contain income-related information will be derived from corrected files. When income data from the 1980 census are used, it is important to note the date of release to be certain only revised data are used.

The following table shows the corrected values for median family income and poverty status for all counties for which changes were made. These values replace those previously published in the October and November 1982 issues of *Business in Nebraska.*

J. A. D.

Table 1

REVISIONS IN INCOME AND POVERTY DATA FROM THE 1980 CENSUS*

County	Median Family Income	Families and Persons Below Poverty: Number of Families	Percent of Families	Number of Persons	Percent of all Persons	Percent of Persons Under 65	Percent of Persons 65 or Over
Brown	$13,028	211	17.1	844	19.5	17.6	----
Chase	15,368	----	----	----	----	----	----
Custer	15,255	484	12.3	2,090	15.3	14.1	----
Deuel	16,135	----	----	----	----	----	----
Furnas	13,663	250	13.5	1,144	18.3	18.0	19.5
Lancaster	21,381	----	----	----	----	----	----
Lincoln	20,814	----	----	2,644	----	----	14.8
Platte	20,224	480	----	2,313	8.1	7.0	----
Scotts Bluff	16,871	4,474	----	----	----	----	----
Nebraska	19,122	33,340	----	163,326	----	----	----

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*Only those values which were revised are included in this table.

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population and Housing, unpublished data from STF 3.

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Business in Nebraska

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NEBRASKA RETAIL SALES, 1981-1982

Nebraska's 1982 net taxable retail sales were $9,260 million, down $205 million from the 1981 total of $9,465 million (Table 2, page 2). On a dollar-volume basis, retail sales declined 2.2 percent in 1982, a dismal downturn from the previous year's 6.1 percent increase. This is the first recorded decline in retail sales since the Nebraska Department of Revenue began collecting sales data almost sixteen years ago and reflects poor economic conditions that prevailed in 1982.

To compensate for price changes that occur annually, dollar-volume retail sales are adjusted with the consumer price index's commodity component. The resulting price-adjusted or 'real' retail sales statistics more accurately reflect annual sales level changes since effects of inflation are filtered out. After these adjustments, net taxable retail sales declined even further, falling 5.9 percent from the sales level recorded in 1981.

To gain a historical perspective of state retail sales behavior, both dollar-volume sales and real sales for the years 1970 through 1982 are displayed in Figure 1. As indicated by Figure 1 bar graphs, dollar-volume retail sales have increased rather steadily during the period, suffering the first decline in 1982. Price-adjusted sales have declined during each of the last three years. The 1980 and 1981 declines were due primarily to accelerating inflation, while the current decline is due mostly to a consumer spending slump produced by the past year's dour economic conditions. As the national economy now appears to be in the first stage of recovery, the poor performance of 1982 state retail sales should not be repeated in 1983. However, the payment-in-kind program for farmers could have a potentially negative impact on retail sales, as seed, fertilizer, and farm implement sales are expected to decline.

The geographic distribution of retail sales by county and planning region--along with the respective changes that have occurred from 1981 to 1982--are summarized in Table 2. It should be noted that the Nebraska Department of Economic Development has implemented changes in the planning-region organization used in previous *Business in Nebraska* articles. Region 5 has been eliminated entirely, with Washington County now in Region 1 and Dodge County in Region 6. Furnas County, formerly in Region 17, is now in Region 16. To be current, this article will use the revised planning-region organization.

(Continued on page 3)

Table 1

NET TAXABLE RETAIL SALES[1] IN SELECTED NEBRASKA TRADING CENTERS, 1981 AND 1982
WITH PERCENTAGE CHANGES FOR SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

Trade Center	Region[2]	Unadjusted for Price Changes: Thousands of Dollars 1981	1982	Percent of Change	Adjusted for Prices[3]: Percent of Change
Alliance	23	70,793	63,643	-10.1	-13.6
Beatrice	14	90,019	86,730	-3.7	-7.4
Bellevue	1	108,361	103,379	-4.6	-8.3
Blair	1	43,366	44,926	+3.6	-0.4
Broken Bow	26	43,781	40,233	-8.1	-11.7
Chadron	23	38,199	34,572	-9.5	-13.0
Columbus	10	153,394	148,866	-3.0	-6.7
Fairbury	14	33,677	36,278	+7.7	+3.6
Falls City	7	32,739	32,070	-2.0	-5.8
Fremont	6	164,108	155,161	-5.5	-9.1
Grand Island	12	353,103	337,950	-4.3	-8.0
Hartington	25	18,247	18,813	+3.1	-0.9
Hastings	13	174,986	159,175	-9.0	-12.6
Holdrege	17	61,793	61,259	-0.9	-4.7
Kearney	15	173,041	174,749	+1.0	-2.9
Kimball	21	38,616	33,033	-14.5	-17.8
Lexington	16	60,802	61,668	+1.4	-2.5
Lincoln	2	1,024,303	991,234	-3.2	-7.0
McCook	20	84,212	85,036	+1.0	-2.9
Nebraska City	4	46,737	46,514	-0.5	-4.3
Norfolk	11	179,521	173,161	-3.5	-7.3
North Platte	18	177,725	174,945	-1.6	-5.4
Ogallala	19	53,723	53,263	-0.9	-4.7
Omaha	1	2,516,193	2,455,601	-2.4	-6.2
O'Neill	24	45,172	45,031	-0.3	-4.2
Scottsbluff/ Gering	22	208,356	189,069	-9.3	-12.8
Seward	8	41,967	40,737	-2.9	-6.7
Sidney	21	42,213	42,858	+1.5	-2.4
So. Sioux City	3	41,199	37,214	-9.7	-13.2
Wayne	11	35,602	35,388	-0.6	-4.4
West Point	6	29,618	30,836	+4.1	-0.1
York	9	72,661	73,398	+1.0	-2.9
Total 32 Centers		6,258,227	6,066,790	-3.1	-6.8
Total State[4]		8,620,878	8,317,986	-3.5	-7.2

[1] Excluding motor vehicle sales.
[2] Nebraska Planning and Development Regions.
[3] Current dollar sales adjusted (deflated) for price changes using commodity prices component of the Bureau of Labor Statistics' Consumer Price Index.
[4] Total state retail sales include some retail sales that cannot be allocated to cities, counties, or regions.
Source: Compilations by Bureau of Business Research from special tabulations provided by Nebraska Tax Commissioner.

Table 2

NET TAXABLE RETAIL SALES[1] IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS, 1981 AND 1982
BY COUNTIES, WITH PERCENTAGE CHANGES FOR SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

Region and County	Unadjusted for Price Changes			Adjusted for Prices[2]
	Thousands of Dollars		Percent of Change	Percent of Change
	1981	1982		
Region 1	3,062,471	3,035,904	-0.9	-4.7
Douglas	2,782,656	2,742,520	-1.4	-5.3
Sarpy	219,840	230,696	+4.9	+0.0
Washington	59,975	62,688	+4.5	+0.5
Region 2	1,128,815	1,111,386	-1.5	-5.4
Lancaster	1,128,815	1,111,386	-1.5	-5.4
Region 3	60,827	57,097	-6.1	-9.8
Dakota	60,827	57,097	-6.1	-9.8
Region 4	194,509	196,090	+0.8	-3.1
Cass	57,805	60,055	+3.9	-0.1
Otoe	74,667	74,381	-0.4	-4.2
Saunders	62,037	61,654	-0.6	-4.5
Region 5	*Region 5 has been eliminated. See explanation on p. 1.*			
Region 6	375,538	376,386	+0.2	-3.6
Burt	35,715	37,204	+4.2	+0.1
Cuming	55,576	58,212	+4.7	+0.7
Dodge	271,435	266,948	-1.7	-5.5
Thurston	12,812	14,022	+9.4	+5.2
Region 7	112,785	112,424	-0.3	-4.2
Johnson	20,573	20,261	-1.5	-5.3
Nemaha	32,576	32,906	+1.0	-2.9
Pawnee	11,206	11,557	+3.1	-0.9
Richardson	48,430	47,700	-1.5	-5.3
Region 8	153,921	155,867	+1.3	-2.7
Butler	29,956	31,579	+5.4	+1.3
Seward	64,437	63,941	-0.8	-4.6
Saline	59,528	60,347	+1.4	-2.5
Region 9	157,685	158,647	+0.6	-3.3
Fillmore	38,072	36,833	-3.3	-7.0
Polk	24,731	25,087	+1.4	-2.5
York	94,882	96,727	+1.9	-2.0
Region 10	288,510	281,784	-2.3	-6.1
Boone	37,007	34,323	-7.3	-10.8
Colfax	46,137	46,006	-0.3	-4.1
Nance	14,479	14,446	-0.2	-4.1
Platte	190,887	187,009	-2.0	-5.8
Region 11	347,305	340,568	-1.9	-5.7
Antelope	37,509	35,400	-5.6	-9.3
Madison	225,812	221,903	-1.7	-5.5
Pierce	30,669	29,054	-5.3	-8.9
Stanton	11,048	11,724	+6.1	+2.0
Wayne	42,267	42,487	+0.5	-3.4
Region 12	485,322	471,291	-2.9	-6.6
Hall	388,833	377,463	-2.9	-6.7
Hamilton	37,140	36,425	-1.9	-5.7
Howard	23,881	23,587	-1.2	-5.1
Merrick	35,468	33,816	-4.7	-8.3
Region 13	286,776	274,334	-4.3	-8.0
Adams	198,850	184,876	-7.0	-10.6
Clay	34,285	34,355	+0.2	-3.7
Nuckolls	35,374	37,485	+6.0	+1.9
Webster	18,267	17,618	-3.6	-7.3
Region 14	202,467	203,735	+0.6	-3.3
Gage	118,804	117,609	-1.0	-4.8
Jefferson	48,418	50,828	+5.0	+0.9
Thayer	35,245	35,298	+0.2	-3.7
Region 15	257,327	262,731	+2.1	-1.8
Buffalo	225,294	228,384	+1.4	-2.5
Kearney	32,033	34,347	+7.2	+3.1
Region 16	185,057	188,962	+2.1	-1.8
Dawson	135,408	136,524	+0.8	-3.1
Frontier	11,614	12,226	+5.3	+1.2
Furnas	28,844	30,052	+4.2	+0.2
Gosper	9,191	10,160	+10.5	+6.3
Region 17	109,437	111,709	+2.1	-1.9
Franklin	16,182	17,350	+7.2	+3.1
Harlan	18,374	18,423	+0.3	-3.6
Phelps	74,881	75,936	+1.4	-2.5
Region 18	217,783	215,513	-1.0	-4.9
Hooker	3,839	4,035	+5.1	+1.0
Lincoln	207,748	204,827	-1.4	-5.2
Logan	1,750	2,026	+15.8	+11.3
McPherson	634	679	+7.1	+3.0
Thomas	3,812	3,946	+3.5	-0.5
Region 19	127,565	124,221	-2.6	-6.4
Arthur	1,326	1,377	+3.8	-0.2
Chase	34,064	31,538	-7.4	-11.0
Grant	3,673	3,767	+2.6	-1.4
Keith	66,571	66,186	-0.6	-4.4
Perkins	21,931	21,353	-2.6	-6.4
Region 20	126,033	130,468	+3.5	-0.5
Dundy	12,757	13,085	+2.6	-1.4
Hayes	2,030	2,201	+8.4	+4.2
Hitchcock	11,736	13,399	+14.2	+9.8
Red Willow	99,510	101,783	+2.3	-1.7
Region 21	109,192	104,386	-4.4	-8.1
Cheyenne	53,589	54,107	+1.0	-2.9
Deuel	11,329	11,702	+3.3	-0.7
Kimball	44,274	38,577	-12.9	-16.2
Region 22	295,136	273,106	-7.5	-11.0
Banner	1,555	1,444	-7.1	-10.7
Garden	9,976	9,922	-0.5	-4.4
Morrill	31,971	30,790	-3.7	-7.4
Scotts Bluff	251,634	230,950	-8.2	-11.8
Region 23	180,675	169,216	-6.3	-10.0
Box Butte	82,549	76,634	-7.2	-10.8
Dawes	49,074	45,317	-7.7	-11.2
Sheridan	45,089	43,672	-3.1	-6.9
Sioux	3,963	3,593	-9.3	-12.8
Region 24	168,226	162,814	-3.2	-7.0
Boyd	9,566	9,598	+0.3	-3.5
Brown	26,117	25,746	-1.4	-5.2
Cherry	35,586	35,891	+0.9	-3.0
Holt	76,844	74,994	-2.4	-6.2
Keya Paha	2,467	2,492	+1.0	-2.9
Rock	17,646	14,093	-20.1	-23.2
Region 25	101,142	104,656	+3.5	-0.5
Cedar	43,278	44,146	+2.0	-1.9
Dixon	15,444	17,233	+11.6	+7.3
Knox	42,420	43,277	+2.0	-1.9
Region 26	140,091	136,106	-2.8	-6.6
Blaine	2,393	2,177	-9.0	-12.5
Custer	70,780	65,215	-7.9	-11.4
Garfield	11,542	11,322	-1.9	-5.7
Greeley	11,022	11,688	+6.0	+1.9
Loup	1,410	1,477	+4.8	+0.7
Sherman	12,861	11,669	-9.3	-12.8
Valley	27,583	30,120	+9.2	+5.0
Wheeler	2,500	2,438	-2.5	-6.3
State Total[3]	9,464,525	9,259,740	-2.2	-5.9

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[1] Motor vehicle sales are recorded as in counties in which the vehicles were first registered, regardless of point of sale.

[2] Current dollar sales adjusted (deflated) for price changes using commodity prices component of the Bureau of Labor Statistics' Consumer Price Index.

[3] Total state retail sales include some retail sales that cannot be allocated to cities, counties, or regions.

Source: Compilation by Bureau of Business Research, University of Nebraska-Lincoln, from tabulations provided by the Nebraska Tax Commissioner.

(Continued from page 1)

Of the 25 state planning regions, only 10 recorded dollar-volume retail sales increases in 1982; fifteen regions fared better than the state-wide sales decline of 2.2 percent (Map 1, page 3). Greatest increases in retail sales occurred in Regions 20 and 25--both +3.5 percent--and in Regions 15, 16, and 17--all +2.1 percent. Further examination of Map 1 reveals that regions where retail sales increases occurred are located primarily in Eastern and South Central Nebraska.

Greatest retail sales declines occurred in Region 22, -7.5 percent; Region 23, -6.3 percent; Region 3, -6.1 percent; Region 21, -4.4 percent; and Region 13, -4.3 percent. These regions encompass Northwestern Nebraska and trade areas served by the cities of Hastings and South Sioux City. Both metropolitan regions experienced net taxable retail sales declines in 1982. On a price-adjusted basis, none of the 25 state planning regions reported a retail sales increase in 1982.

During 1982, 48 of Nebraska's 93 counties experienced a net taxable retail sales increase, and 68 counties fared better than the 2.2 percent decrease for the state as a whole (Map 2, page 3). Unlike the planning-region distribution of sales increases, counties with positive changes in retail sales are more widely distributed state-wide. Counties with greatest retail sales increases during 1982 were Logan County, +15.8 percent; Hitchcock County, +14.2 percent; Dixon County, +11.6 percent; Gosper County, +10.5 percent; Thurston County, +9.4 percent; Valley County, +9.2 percent; and Hayes County, +8.4 percent. For the remaining 41 counties with retail sales gains, increases ranged from 7.2 percent for Kearney County to 0.2 percent for Clay County and Thayer County. When adjustments for price changes are considered, only 23 Nebraska counties reported net taxable retail sales gains in 1982.

Of the 45 counties that experienced 1982 retail sales declines, greatest losses occurred in Rock County, -20.1 percent; Kimball County, -12.9 percent; Sioux County, -9.3 percent; Sherman County, -9.3 percent; Scottsbluff County, -9.0 percent; Custer County, -7.9 percent; and Dawes County, -7.7 percent. Although more counties experienced retail sales increases than declines, the state-wide change in retail sales level from 1981 to 1982 was negative. This was partly because Douglas County and Lancaster County, which together accounted for 41 percent of total state sales, showed 1982 sales declines of 1.4 percent and 1.5 percent, respectively. In addition, the 48 counties that did show gains in retail sales together accounted for only 21 percent of total sales.

Data on 1981 and 1982 retail sales for 32 Nebraska trade centers are summarized in Table 1. It should be noted that the data in Table 1 do not include motor-vehicle retail sales, while the data in Table 2 do include this total retail sales component.

As an aggregate, the 32 trade centers reported a 3.1 percent decline in the 1982 net taxable retail sales level in comparison with the 1981 level. This compares to an approximately seven percent increase for the previous year. When adjusted for price changes, retail sales for the 32 trade centers declined 6.8 percent from the 1981 total. State-wide, the real non-vehicle sales decline was 7.2 percent.

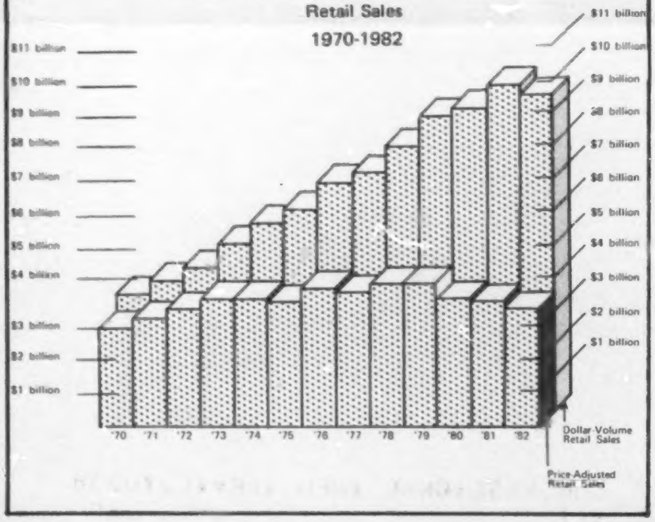
Of the 32 trade centers, only 8 centers reported any dollar-volume sales gain in 1982. On a price-adjusted basis, none of the trade centers reported a retail sales increase. Greatest increases in unadjusted sales were reported by Fairbury, +7.7 percent; West Point, +4.1 percent; and Hartington, +3.1 percent. Greatest declines in 1982 sales occurred at Kimball, -14.5 percent; Alliance, -10.1 percent; South Sioux City, -9.7 percent; Chadron, -9.5 percent; Scottsbluff/Gering, -9.3 percent; and Hastings, -9.0 percent.

C.L.B.

FIGURE 1

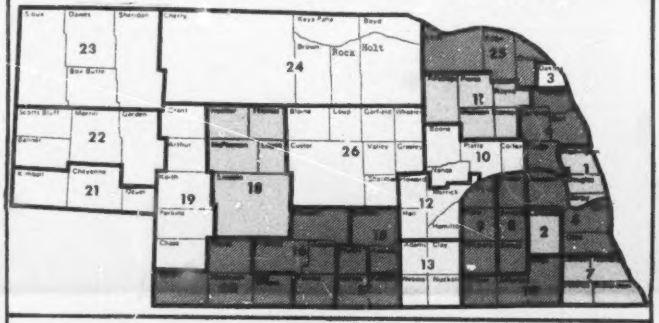
Nebraska Dollar-Volume and Price-Adjusted Retail Sales

1970-1982



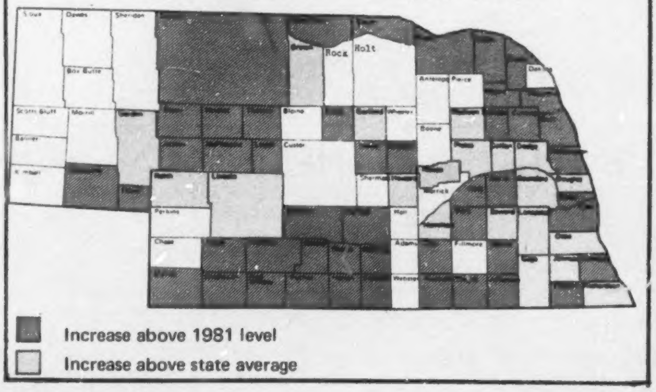
MAP 1

Regions Recording Above-1981-Level Gains and Above-State-Average Changes in Retail Sales Dollar-Volume, 1981-1982



MAP 2

Counties Recording Above-1981-Level Gains and Above-State-Average Changes in Retail Sales Dollar-Volume, 1981-1982



Review and Outlook

January 1983 marked the third consecutive monthly increase in the level of Nebraska's economic activity, as measured by the Bureau of Business Research's physical volume of output index. Compared to December 1982, this index rose 2.9 percent but was 1.3 percent below the level of January 1982. The primary reason for this December-to-January advance was a 29.2 percent increase in the agricultural component of the index.

The index of nonagricultural output, on the other hand, fell 1.6 percent, with three of four sectors declining. The month-to-month percentage changes for the nonagricultural sectors were government, +0.4 percent; distributive, -0.9 percent; manufacturing, -4.8 percent; and construction, -5.7 percent.

It should be noted that the January estimates of economic activity are based on revised data which produced sizable changes in some of the sectoral indexes. These changes were due to annual revisions in the data series, which are used to construct the indexes, and in the factors used to adjust some of the data for seasonal variations. The largest revisions occurred in the employment and cash farm marketing series. The indexes in Table 2 reflect these changes and, as a result, are not directly comparable to data published in previous issues of *Business in Nebraska.* This annual update is designed to improve the accuracy of the measures.

The January 1983 increase in the agricultural index reflects substantial gains in cash farm marketing receipts during the previous three months. On a seasonally-adjusted

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

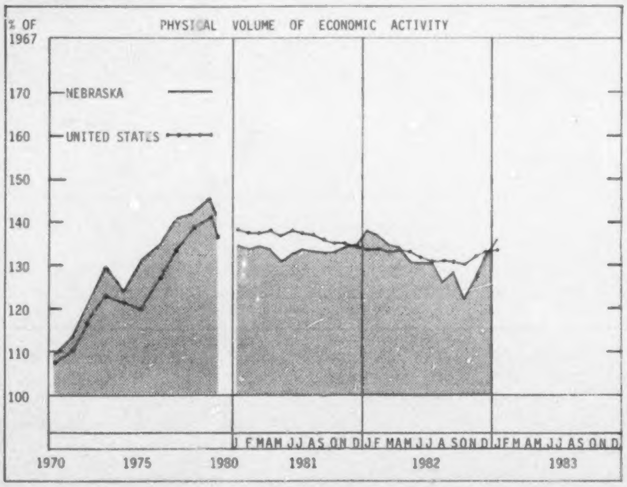
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

January 1983	Current Month as Percent of Same Month Previous Year		1983 Year to Date as Percent of 1982 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.2	102.8	102.2	102.8
Agricultural	108.1	99.6	108.1	99.6
Nonagricultural	101.2	102.9	101.2	102.9
Construction	87.7	113.5	87.7	113.5
Manufacturing	83.1	91.0	83.1	91.0
Distributive	106.1	106.7	106.1	106.7
Government	107.6	105.6	107.6	105.6
Physical Volume	98.7	99.2	98.7	99.2
Agricultural	108.1	103.0	108.1	103.0
Nonagricultural	96.8	99.1	96.8	99.1
Construction	83.7	108.3	83.7	108.3
Manufacturing	82.3	90.4	82.3	90.4
Distributive	102.2	102.8	102.2	102.8
Government	99.2	98.8	99.2	98.8

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	372.7	368.9
Agricultural	450.6	353.1
Nonagricultural	360.7	369.4
Construction	197.6	340.2
Manufacturing	296.2	276.5
Distributive	395.0	420.8
Government	384.6	382.1
Physical Volume	136.0	133.0
Agricultural	186.2	150.3
Nonagricultural	128.3	132.4
Construction	56.8	97.8
Manufacturing	123.3	112.3
Distributive	134.8	143.6
Government	142.0	145.8

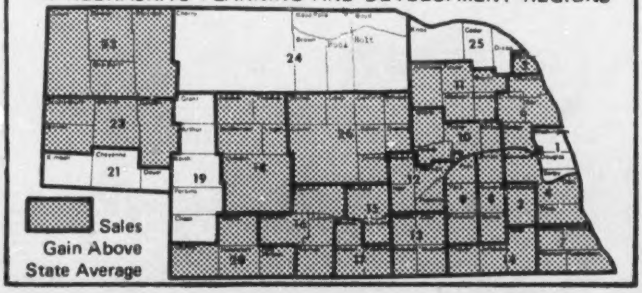


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

Region Number and City	City Sales *	Sales in Region *	
	Jan. 1983 as percent of Jan. 1982	Jan. 1983 as percent of Jan. 1982	Year-to-date '83 as percent of Year-to-date '82
The State	105.4	108.8	108.8
1 Omaha	98.2	103.4	103.4
Bellevue	117.6		
Blair	109.0		
2 Lincoln	112.1	114.6	114.6
3 So. Sioux City	121.9	122.2	122.2
4 Nebraska City	117.9	113.4	113.4
6 Fremont	131.5	118.8	118.8
West Point	118.9		
7 Falls City	115.2	116.5	116.5
8 Seward	114.8	114.8	114.8
9 York	112.7	115.2	115.2
10 Columbus	147.3	130.4	130.4
11 Norfolk	120.4	128.0	128.0
Wayne	98.2		
12 Grand Island	119.7	120.6	120.6
13 Hastings	124.0	116.9	116.9
14 Beatrice	115.6	120.2	120.2
Fairbury	121.1		
15 Kearney	126.2	122.6	122.6
16 Lexington	113.4	112.4	112.4
17 Holdrege	132.1	122.4	122.4
18 North Platte	122.1	123.9	123.9
19 Ogallala	119.1	111.1	111.1
20 McCook	128.0	116.4	116.4
21 Sidney	113.0	98.8	98.8
Kimball	76.8		
22 Scottsbluff/Gering	119.3	115.7	115.7
23 Alliance	112.2	117.7	117.7
Chadron	112.6		
24 O'Neill	111.6	102.3	102.3
25 Hartington	111.1	109.0	109.0
26 Broken Bow	108.9	115.1	115.1

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Regionl totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1983 YEAR TO DATE AS PERCENT OF 1982 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(Continued from page 4)

basis, marketings were $725 million and rose 9.6 percent above December 1982's levels. Compared to January 1982, they were up nearly twenty-one percent.

Nonagricultural output had been weak throughout 1982, and January 1983 data failed to provide evidence of any recovery in these sectors. Compared to January 1982, only the distributive sector (reflecting improved retail sales) recorded a gain. Not only were the indexes of the three remaining nonagricultural sectors below January 1982 values, manufacturing and construction were at their lowest levels in recent years.

Nebraska net taxable retail sales totaled $700.6 million in January 1983, an 8.8 percent increase from January 1982. Even after adjusting for price changes, real sales showed a 5.3 percent growth. The commodity component of the Consumer Price Index, which was used to adjust the sales, increased 3.2 percent.

Motor vehicle sales continued its growth spurt, begun in April 1982, with an increase of 46.6 percent (42.0 percent, price adjusted) in January 1983, compared to the previous January. Motor vehicle sales in January were $77.7 million.

Nonmotor vehicle sales, on the other hand, reversed an eight-month trend of year-to-year losses. January sales reached $622.9 million, an increase of 5.4 percent from January 1982. Adjusted for price changes, the increase was 2.0 percent. Even though part of the January 1983 increases resulted from the fact that January 1982 was a weak month for sales, an increase after eight consecutive losses is encouraging.

Data in Table 3 show that much of the state shared in Nebraska's growth in sales, as 29 of the 33 communities listed recorded gains in sales. Communities with the largest increases include Columbus, +47.3 percent; Holdrege, +32.1 percent; Fremont, +31.5 percent; McCook, +28.0 percent; and Kearney, +26.2 percent.

It is important to note that, beginning in this issue of *Business in Nebraska,* the ratios in Table 3 will reflect changes on a current dollar basis. Previously they had been adjusted to account for changes in prices. This new method of presentation should allow for a more realistic comparison of sales of individual businesses with those in their area or the state.

The city business indexes reflect the widespread impact of the increase in retail sales, as 25 of the 27 city indexes increased relative to January 1982. Omaha and Falls City were the two cities to record losses on a year-to-year basis. Columbus recorded a gain of 15.6 percent, the largest for the month. Other communities recording gains above 10 percent include Fremont, Holdrege, Bellevue, McCook, and Kearney.

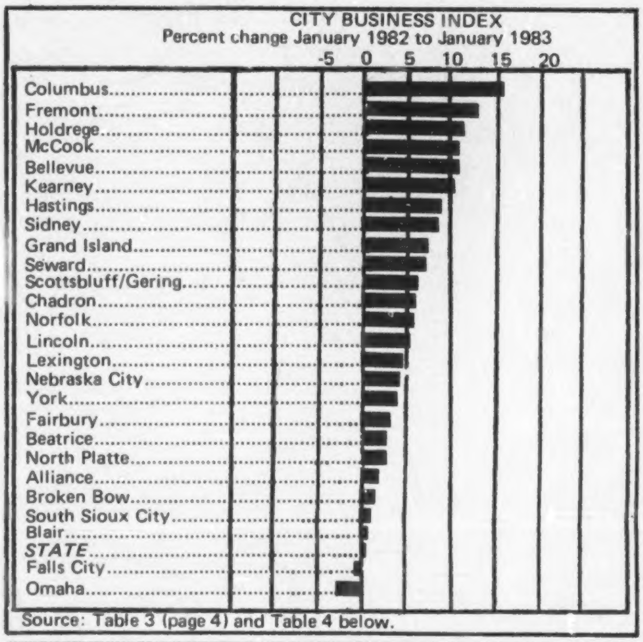
J. A. D.

5. PRICE INDEXES

January 1983	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	293.1	103.8	103.8
Commodity component	267.2	103.2	103.2
Wholesale Prices	300.0	100.6	100.6
Agricultural Prices			
United States	235.0	96.7	96.7
Nebraska	242.0	100.0	100.0

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.


CITY BUSINESS INDEX
Percent change January 1982 to January 1983

Source: Table 3 (page 4) and Table 4 below.

4. JANUARY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	99.7	98.0	81.9
Alliance	100.5	61.0	101.2
Beatrice	99.8	60.8	85.6
Bellevue	102.9	204.2	143.4
Blair	103.5	52.3	94.9*
Broken Bow	105.6	50.5	84.8
Chadron	100.3	157.5	52.6
Columbus	98.2	58.8	84.0
Fairbury	100.4	37.8	64.5*
Falls City	100.9	28.2	79.3
Fremont	101.1	102.2	78.2
Grand Island	97.9	125.2	96.3
Hastings	95.8	143.0	89.3
Holdrege	104.3	51.8	85.1
Kearney	101.7	92.5	92.6
Lexington	101.0	97.1	77.6
Lincoln	97.4	173.9	83.8
McCook	108.0	51.0	95.5
Nebraska City	104.9	42.9	85.1
Norfolk	99.1	82.0	84.4
North Platte	90.3	82.3	93.7
Omaha	97.8	94.2	69.0
Scottsbluff/Gering	101.7	78.6	89.5
Seward	101.2	143.0	86.0
Sidney	103.4	184.5	90.1
So. Sioux City	98.0	28.3	138.3
York	103.7	70.4	80.0

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

HOUSING UNITS AUTHORIZED IN NEBRASKA AND SELECTED AREAS, 1980-1982

Nebraska's construction industry slump continued in 1982. The accompanying table shows that new, privately-owned units authorized by building permits in the state of Nebraska in 1982 declined only 1.2 percent, as compared to the sharp decline of 40.6 percent in 1981. However, the 1982 figures are less than one-half the 1979 totals for Nebraska; this fact accentuates the three-year fall in construction activity.

The numbers represent close estimates of residential construction, even though they do not translate directly into private housing units built in any given year. Caution should be exercised when interpreting percentage changes where the total number of permits is small. In these situations, small, absolute changes may produce large percentage changes and exaggerate the overall impact of the change on the area.

In the 22 selected areas reported over the 1980-1982 period, 19 experienced declines. Of these, 13 communities experienced losses greater than that of the state. Communities that suffered most include Crete, -98.9 percent; Alliance, -97.5 percent; North Platte, -91.2 percent; South Sioux City, -82.1 percent; Fremont, -81.8 percent; and Lincoln, -77.6 percent.

Despite its 1980-1982 losses, examination of individual, yearly changes allows a more detailed perspective on the construction industry's status. The percentage change from 1980 to 1981 was negative for 18 communities. From 1981 to 1982, however, only 11 communities reported declines in number of building permits authorized (12, including Norfolk). Of the 11 areas that experienced gains in 1982, 10 had reversed their 1981 declines. Most dramatic changes were La Vista, -90.1 to 416.7 percent; unincorporated Sarpy County, -82.5 to 156.0 percent; Bellevue, -66.3 to 132.6 percent; and Scottsbluff, -60.0 to 50.0 percent. On the other hand, only McCook showed gains in each of the two years. Beatrice and Papillion joined McCook as the only areas registering gains for the 1980-1982 period.

The large increase in absolute numbers of new, privately-owned housing units authorized by building permits in Eastern Nebraska (which includes the Sarpy County areas Bellevue, La Vista, Papillion, and an unincorporated remainder)--coupled with the encouraging data on the Western Nebraska cities of McCook and Scottsbluff--may indicate that the decline in the number of permits issued for Nebraska may have bottomed out.

JOHN WINGENDER

NUMBER OF NEW, PRIVATELY-OWNED HOUSING UNITS AUTHORIZED BY BUILDING PERMITS

	1980	1981	1982	Percent Change 1980 to 1981	Percent Change 1981 to 1982	Percent Change 1980 to1982
STATE	6,906	4,101	4,051	-40.6	-1.2	-41.3
Alliance	202	44	5	-78.2	-88.6	-97.5
Kearney	236	120	162	-49.1	+35.0	-31.4
Plattsmouth	26	44	11	+69.2	-75.0	-57.7
South Sioux City	78	21	14	-73.1	-33.3	-82.1
Lexington	37	21	23	-43.2	+9.5	-37.8
Fremont	66	31	12	-53.0	-61.3	-81.8
Omaha	1,471	805	1,103	-45.3	+37.0	-25.0
Beatrice	46	43	67	-6.5	+55.8	+45.7
Grand Island	272	276	152	+1.5	-44.9	-44.1
Lincoln	1,043	629	234	-39.7	-62.8	-77.6
North Platte	159	104	14	-34.6	-86.5	-91.2
Norfolk	92 (9 months)	77	37		-51.9	
Columbus	183	117	68	-36.1	-41.9	-62.8
McCook	27	28	52	+3.7	+85.7	+92.6
Crete	88	14	1	-84.1	-92.9	-98.9
Bellevue	282	95	221	-66.3	+132.6	-21.6
La Vista	121	12	62	-90.1	+416.7	-48.8
Papillion	169	115	174	-32.0	+51.3	+3.0
Sarpy Co. (unincorporated)	480	84	215	-82.5	+156.0	-55.2
Gering	43	53	13	+23.3	-75.5	-69.7
Scottsbluff	92	20	39	-78.3	+95.0	-57.6
Seward	25	10	15	-60.0	+50.0	-40.0
Blair	28	27	24	-3.6	-11.1	-14.3

Source: U.S. Department of Commerce, Bureau of the Census, *Housing Units Authorized by Building Permits and Public Contracts: Annual 1981* and *December 1982,* Construction Reports, C40 series.

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FINANCIAL CONDITIONS IN NEBRASKA AGRICULTURE

by
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INTRODUCTION

Agriculture's financial structure has dramatically changed in recent years. Agricultural debt has rapidly expanded here in Nebraska, as well as nationally. It has essentially doubled since 1977. For American farmers, interest charges accounted for about fifteen percent of total production expenses in 1982, compared with 12 percent in 1980 and 7 percent in 1973. [3] Although specific data are not available, a similar pattern could be anticipated for Nebraska.

During the 1970s, assets (particularly real estate) were rapidly appreciating in value. Therefore, farm sector equity was increasing along with expanded debt, and the debt-to-asset ratio for the total sector remained essentially stable at about .16 to .17.

However, during the first part of the 1980s, some deterioration of the United States farming sector's financial position has occurred. Net worth has declined during the past two years, primarily because of falling land values. Simultaneously, the sector has continued to expand its debt holdings, although at a slower rate than that of the 1970s. Consequently, the debt-to-asset ratio for the United States' farm sector, as of January 1983, is forecasted to be .20--highest level in 40 years. [3]

While these changes are some cause for concern, the farming sector's aggregate financial situation still appears quite sound. Few if any other manufacturing industries of the United States economy could boast of a debt-to-asset relationship so low.[1] However, imbedded within this aggregate financial statement is a heterogeneous group of financial conditions comprised of farmers and other ownership groups. Many of these have experienced severe financial stresses in recent years and are not as financially sound as is the sector as a whole. Thus, a more detailed financial analysis is in order.

The purpose here is to focus on the current financial condition of Nebraska's farming sector, and--to the extent possible--divide it into its more meaningful component parts for more detailed analysis. Results of the 1979 Farm Finance Survey will be used extensively for this effort.[2] In addition, state-level balance sheet statistics from USDA sources will serve as a base point.

THE NEBRASKA SITUATION

A time comparison of balance sheet characteristics reveals rather substantial changes in the financial position of Nebraska's farming sector (see top portion of Table 1). Since early 1977, total farm debt (in current dollar terms) has more than doubled. Largest annual gains in debt were occurring during the late 1970s--a time of rapid asset appreciation and relatively low-cost credit. However, even with reversal of these conditions in the early 1980s, the debt load still grew; the January 1, 1983 preliminary estimate is about twenty-five percent above the 1980 level.

As noted earlier, farm assets (particularly land) were rapidly appreciating during the last half of the 1970s. For the three-year period--January 1, 1977 to January 1, 1980--the Nebraska farming sector's asset value increased more than fifty percent. Because of such gains, the sector's financial position remained quite healthy, even though debt was expanding at the rate of nearly one billion dollars per year. Farm sector equity grew by more than $10.7 billion during the decade's last three years. As of January 1, 1980, the sector's debt-to-asset ratio remained below .19--a modest debt encumbrance level. Likewise, debt as a percent of equity (the leverage ratio) was less than .25.

In marked contrast to the late 1970s, 1980-1982 was a period of sharp equity decline, paced by lower land values. Low farm income for three successive years was obviously the major force behind this asset depreciation. Coupled with continued debt expansion, the sector's balance sheet position has deteriorated. While debt expanded nearly two billion dollars, total asset value dropped more than $1.5 billion from January 1, 1980's level. Thus, the equity or net worth position in current dollar terms, as of January 1, 1983, was more than ten percent below the level at this decade's beginning.[3] Correspondingly, current financial ratios also reveal some financial erosion. The debt-to-asset ratio jumped to .246; while, conversely, equity as a percent of assets dropped to .754. Yet, the financial position for Nebraska's farm sector as a whole appears basically sound. The ratio of total assets to debt remains above 4 to 1--which, in terms of debt repayment ability, can generally be regarded as a very solvent position.

It bears repeating, however, that averages for the total sector are only crude representations of the various individuals and groups of individuals which comprise the sector. Therefore, further delineation of the sector into its key component groups is necessary to more fully appraise agriculture's financial health.

Table 1

BALANCE SHEET CHARACTERISTICS FOR FARM SECTOR, FARM OPERATORS, AND INDEBTED OPERATORS IN NEBRASKA
BEGINNING YEAR ESTIMATES FOR 1977, 1980, AND 1983*

BALANCE SHEET FOR:	JANUARY 1, 1977	JANUARY 1, 1980	JANUARY 1, 1983**
STATE FARM SECTOR			
Total Farm Assets (million $)	$26,709.5	$40,384.3	$38,838.7
Total Farm Liabilities (million $)	4,696.3	7,645.6	9,547.1
Equity (million $)	22,013.2	32,738.7	29,291.6
Financial Ratios:			
Debt/Assets	.176	.189	.246
Debt/Equity	.213	.234	.326
Assets/Debt	5.687	5.282	4.068
Equity/Assets	.824	.811	.754
FARM OPERATORS ONLY			
Total Farm Assets (million $)	18,296.0	27,663.2	26,604.5
Total Farm Liabilities (million $)	4,384.0	7,137.2	8,912.2
Equity (million $)	13,912.0	20,526.0	17,692.3
Financial Ratios:			
Debt/Assets	.240	.258	.335
Debt/Equity	.213	.348	.504
Assets/Debt	4.173	3.876	2.985
Equity/Assets	.760	.742	.665
INDEBTED OPERATORS ONLY			
Total Farm Assets (million $)	14,087.9	21,300.7	20,538.7
Total Farm Liabilities (million $)	4,384.0	7,137.2	8,912.2
Equity (million $)	9,703.9	14,163.5	11,626.5
Financial Ratios:			
Debt/Assets	.311	.335	.434
Debt/Equity	.452	.504	.767
Assets/Debt	3.214	2.985	2.305
Equity/Assets	.689	.665	.566

*State farm sector estimates for 1977 and 1980 are as published in *Economic Indicators of the Farm Sector, State Income & Balance Sheet Statistics, 1981*, Economic Research Service, U. S. Department of Agriculture, ECIFS 1-2, October 1972. The statistics for farm operators and indebted operators are derived from sector totals using relative distribution of assets and claims as reported for Nebraska in the Bureau of Census, 1979 Farm Finance Survey.

**A preliminary estimate.

FARM OPERATORS ONLY

A significant proportion of farm assets are not owned by farm operators, but rather by nonfarmer landlords. Therefore, the first logical step of disaggregation is separating the landlord portion and the farm operator portions of the aggregate balance sheet.

The 1979 Farm Finance Survey indicated that some seventy-five thousand nonfarmer landlords own nearly thirty-two percent of all assets in Nebraska's farming sector. As expected, real estate comprises the bulk of their farm asset value; thus, landlords account for approximately forty-four percent of the sector's total real estate asset value.

While their asset position is substantial, landlords tend to have little or no debt (Table 2). In fact, most landlords are debt-free. According to the 1979 Farm Finance Survey, only 12 percent of Nebraska's farm landlords reportedly had agricultural debt. Moreover, the magnitude of debt--where it did occur among this group--was small, relative to debt levels of active farmers. Consequently, the landlord share of total farm sector debt is less than seven percent.

Removal of the landlord portion from the sector's balance sheet leaves a balance sheet for Nebraska's active farm operators only. As indicated in Table 1, this delineation reveals a financial condition for active farmers somewhat different from that of the total sector. More specifically, the financial deterioration since 1980 has been more pronounced; total farmer equity has declined some fourteen percent in nominal terms (approximately twenty-five percent in real terms). The current debt-to-asset ratio for farm operators is nearly .34, while the net capital ratio--total assets to total debt--is at 3. Comparing current conditions with 1977 levels, in terms of equity-to-assets, indicates a clear regression of financial well-being for active farmers; particularly since 1980 has the relative debt encumbrance grown substantially.

However, further delineation is also necessary in our financial conditions analysis.

INDEBTED FARM OPERATORS

While debt is commonly viewed as an economic necessity, a surprising number of Nebraska farmers are debt-free. According to the 1979 Farm Finance Survey, about one-third (34 percent) were debt-free at 1979's conclusion. However, as can be noted in Table 2, these farm operations tend to be smaller than those of operators with debt--less than 60 percent in terms of asset value. Thus, the proportion of operator-owned farm assets held by this debt-free farmer group was only 23 percent.

Nevertheless, removal of this group's asset value leads to a further, sizable adjustment of Nebraska agriculture's financial profile. The residual group, which represents Nebraska's farmers having agricultural debt, is comprised of some 41,600 operators. On

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average, this group owned assets valued at about $494,000 per farm operator on January 1, 1983. However, average claims against those assets exceeded $214,000, implying a debt-to-asset ratio of .434. Moreover, the ratio of assets-to-debt for indebted farmers is currently 2.3 (most lenders would prefer to avoid a solvency position below 2 to 1).

A time comparison reveals that the financial situation's deterioration has been particularly acute for indebted farm operators. Since January 1980, their equity (net worth) in current dollar terms has declined 18 percent in nominal terms and about thirty-two percent in real terms. In other words, for the years 1980-1982, the indebted farm operator group saw its equity position erode from an average of $340,500 per operation to $279,500--a decline of more than $20,000 per year. Over the same time period, their indebtedness grew 25 percent (an average of $14,700 per year per operation). Assuming the current average interest rate of 12 percent on debt owed by indebted operators, the current annual interest obligation to creditors averages about $26,000 per operation! It is, therefore, obvious why problems of cash flow have been so severe during these recent years of short income and high interest rates.

CONCLUSIONS AND IMPLICATIONS

Balance sheet analysis of Nebraska's farming sector reveals substantial changes occurring recently. Asset depreciation occurring over the past two years--coupled with major debt expansion since the mid-1970s--has resulted in some financial deterioration for the sector as a whole. Yet, more grave are financial structural changes occurring among this state's 42,000 indebted farm operators. For this group, which accounts for about two of every three Nebraska farm operators, creditors' claims are now approaching 45 percent of their asset holdings. If this is the *average* debt-to-asset ratio for all indebted farmer operators, then many of these individual farmers have even higher ratios. Current financial exposure for perhaps as many as one of every six Nebraska farmers is seriously high; i.e., an asset-to-debt ratio falling considerably below 2. Besides severe cash flow problems arising from these heavy debt loads, deteriorating financial solvency becomes a mounting concern.[4] In the eyes of the typical lender, these farmers' credit-worthiness is in jeopardy. Whether these farmers could sustain another low-income year with further asset depreciation is debatable. Economic survival lies in the balance--a delicate balance indeed.

As for debt-free farmers and most farm landlords, the past few years have certainly been a period of equity erosion. Large capital gains accumulated during the previous decade, but only a few owners realized such gains by selling 'high' their land and other farm assets. Much of what so dramatically appeared as unrealized 'paper wealth' on individual net worth statements has essentially vanished almost as quickly. In fact, farmland--the primary farm asset--was valued in real terms in early 1983 at levels comparable to 1975 values. In short, due largely to recent asset depreciation, virtually no inflation-adjusted capital gains have accrued to Nebraska farmland owners since 1975.

However, while their net worth has declined, debt-free farmer operators and virtually all farm landlords remain financially sound. Unplagued by debt encumbrances, they are usually able to maintain positive cash flows--despite depressed farm income levels. Moreover, there often are sizable income flows from off-farm sources to these owners--particularly landlords. As a consequence, these asset owner groups' economic survival is not an issue.

(Continued on page 6)

Table 2

FINANCIAL PROFILE OF MAJOR OWNER GROUPS COMPRISING NEBRASKA'S FARMING SECTOR: JANUARY 1, 1983*

ITEM	FARM LANDLORDS	DEBT-FREE FARM OPERATORS	INDEBTED FARM OPERATORS
Number of Owners	74,729	21,595	41,595
ASSETS:			
Total Farm Assets $/owner	$163,700	$281,400	$493,800
Real Estate Assets $/owner	$155,400	$160,300	$278,100
CLAIMS:			
Total Farm Debt $/owner	$ 8,500	----	$214,300
Real Estate Debt $/owner	$ 6,054	-----	$ 85,400
EQUITY: $/owner	$155,200	$281,400	$279,500

*Based upon (1) numbers and relative distribution of assets and claims reported for Nebraska in the Bureau of Census, 1979 Farm Finance Survey and (2) a preliminary estimate of the farm sector balance sheet for January 1, 1983.

Review and Outlook

Nebraska's economy recorded a slight decrease in economic activity in February compared with January 1983. The Bureau of Business Research's net physical volume index declined a scant 0.2 percent. As has been the case in recent months, the agricultural sector moved in one direction, while the nonagricultural sector moved in the opposite direction.

The agricultural component recorded a 0.4 percent increase January—February 1983. February cash receipts were estimated $587 million, up $18 million from February 1982. On a seasonally-adjusted basis, cash farm marketings were up 3.2 percent.

Prices received for Nebraska agricultural products were unchanged, when compared with one year previous. On a month-to-month basis, prices were up 2.1 percent. Nationally, prices received were up 2.6 percent, on a month-to-month basis, but down 0.4 percent, when compared with one year ago.

The economy's nonagricultural component continues to exhibit weakness. The Bureau's net physical volume index dropped 0.4 percent. Construction was down 4.9 percent, on a month-to-month basis. This sector remains very depressed, when compared with previous years, although there is some reason for guarded optimism for the remainder of 1983. Not reflected in the index, at this point, is the slight rise in residential housing starts in Nebraska and the anticipated highway construction growth, following introduction of the five-cents-a-gallon gasoline tax. Construction should provide the state's economy a modest boost in months ahead.

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

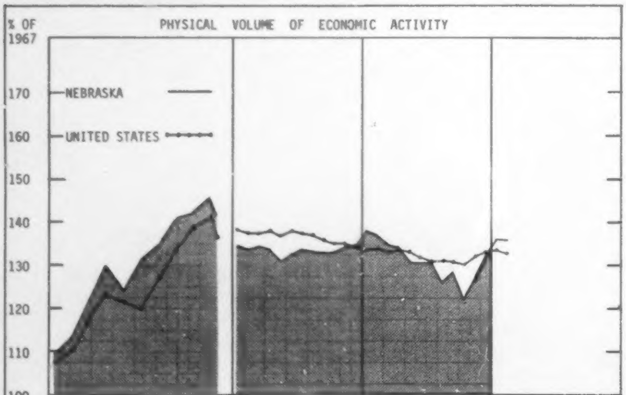
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

February 1983	Current Month as Percent of Same Month Previous Year		1983 Year to Date as Percent of 1982 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.4	102.3	102.3	102.6
Agricultural	114.2	103.9	111.2	102.0
Nonagricultural	100.3	102.2	100.7	102.6
Construction	86.3	112.7	87.0	113.2
Manufacturing	82.1	92.4	82.8	91.8
Distributive	105.1	104.9	105.5	105.8
Government	107.6	105.7	107.6	105.6
Physical Volume	99.1	99.0	98.9	99.2
Agricultural	114.2	104.3	111.2	103.9
Nonagricultural	96.2	98.8	96.6	99.1
Construction	84.8	110.7	85.7	111.6
Manufacturing	81.0	91.8	81.8	91.2
Distributive	101.6	101.4	101.8	102.1
Government	99.3	99.3	99.2	99.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	373.4	368.1
Agricultural	462.4	343.3
Nonagricultural	359.7	368.9
Construction	188.4	334.1
Manufacturing	291.3	279.6
Distributive	395.3	418.2
Government	386.6	383.8
Physical Volume	135.7	132.7
Agricultural	187.2	142.4
Nonagricultural	127.8	132.4
Construction	55.9	99.1
Manufacturing	120.9	113.4
Distributive	134.8	142.6
Government	142.1	146.4



3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

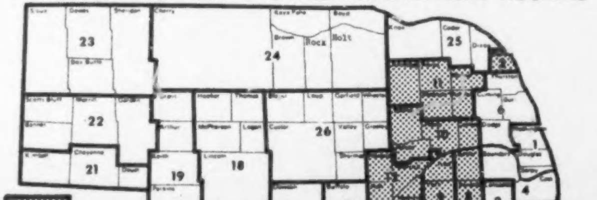
Region Number[1] and City	City Sales[2]	Sales in Region[2]	
	Feb. 1983 as percent of Feb. 1982	Feb. 1983 as percent of Feb. 1982	Year-to-date '83 as percent of Year-to-date '8
The State	92.8	94.2	100.6
1 Omaha	103.2	104.7	103.4
Bellevue	111.8		
Blair	96.9		
2 Lincoln	93.1	94.5	103.5
3 So. Sioux City	80.6	89.6	103.6
4 Nebraska City	82.2	100.8	105.4
6 Fremont	69.7	81.9	97.9
West Point	97.6		
7 Falls City	94.9	93.1	103.2
8 Seward	87.9	98.8	105.5
9 York	96.8	99.7	106.0
10 Columbus	94.8	96.1	111.6
11 Norfolk	96.0	96.6	111.1
Wayne	104.1		
12 Grand Island	94.3	98.0	108.0
13 Hastings	94.2	95.1	104.4
14 Beatrice	97.9	101.4	109.5
Fairbury	112.4		
15 Kearney	88.4	87.7	103.1
16 Lexington	92.0	92.8	101.4
17 Holdrege	77.3	87.4	102.4
18 North Platte	97.4	101.7	111.5
19 Ogallala	97.6	93.8	101.1
20 McCook	77.9	84.6	98.9
21 Sidney	73.3	74.1	85.0
Kimball	61.0		
22 Scottsbluff/Gering	91.4	90.5	101.4
23 Alliance	74.3	80.7	97.1
Chadron	68.9		
24 O'Neill	88.0	86.7	93.2
25 Hartington	93.6	95.5	100.9
26 Broken Bow	85.3	91.6	101.5

[1] See region map below.

[2] Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales; city totals exclude motor vehicle sales.

Compiled from data provided by Nebraska Department of Revenue.

1983 YEAR TO DATE AS PERCENT OF 1982 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(Continued from page 4)

The manufacturing component of the Bureau's index declined 2.4 percent January—February 1983. The index was estimated at 120.9 in February 1983 (1967=100), its lowest point in the recession. By way of comparison, the manufacturing component of the Bureau's index was 149.3 in February 1982 and 153.6 in February 1981. For manufacturing to provide the state's economy a boost, recall of many furloughed employees would have to occur. Manufacturing employment in Nebraska has declined almost 20,000 jobs since January 1980. March 1983's manufacturing employment was estimated at 79,550. Modest manufacturing employment gains are forecast over 1983.

Nebraska's distributive trade sector recorded a slight 0.2 percent increase, on a month-to-month basis. The distributive trade index was estimated at 134.8 in February 1983 (1967=100). This is slightly ahead of February 1982, when the index was estimated at 132.8, and 1981, when the index was 132.3. The distributive trade sector has weathered the recession better than manufacturing or construction.

Retail sales continued weak in February. Total retail sales were estimated at $622 million, compared with $660 million in February 1982. On a dollar volume basis, retail sales fell 5.8 percent in the state. When adjusted for price changes, retail sales dwindled 8.3 percent. Prices were adjusted using the commodity component of the consumer price index which recorded a 2.8 percent increase over the interval February 1982—February 1983. Inflation continues to ease, although increases are anticipated during 1983's latter half.

Like the state economy's other components, retail sales exhibited a mixed picture. Motor vehicle sales were the strongest segment, recording a +10.5 percent on a dollar volume basis. Adjusted for price changes, motor vehicle sales rose 7.5 percent.

Nonmotor vehicle sales diminished approximately $45 million dollars, on a year-to-year basis. Sales totaled $561 million in February 1983, compared with $605 million in February 1982. On a dollar volume basis, nonmotor vehicle sales slackened 7.2 percent. When adjusted for price changes, nonmotor vehicle real retail sales were down 9.7 percent.

Statewide, of course, retail sales were down (as noted above), but there are some exceptions to this weakness. Omaha and Bellevue recorded retail sales increases in February 1983, compared with one year previous. Sales were also above year-previous levels in Wayne and Fairbury.

Bellevue led all cities in the Bureau's city business index this month. Building activity, retail sales, and employment were instrumental in pushing Bellevue to the top.

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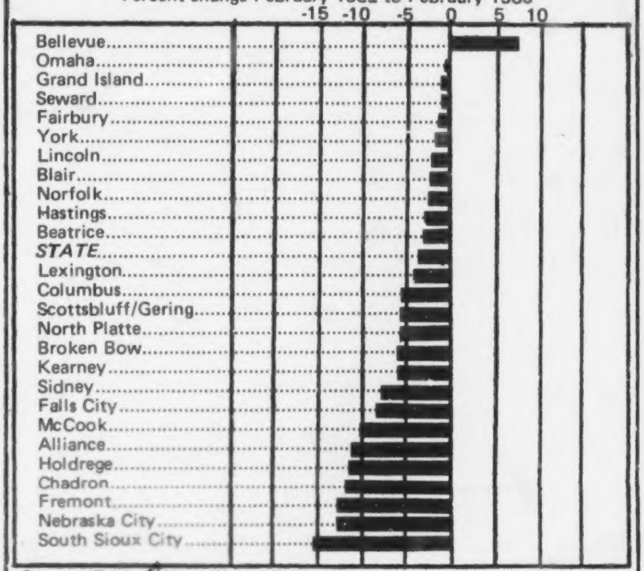
5. PRICE INDEXES

February 1983	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	293.2	103.5	103.6
Commodity component	266.7	102.8	103.0
Wholesale Prices	301.2	100.9	100.7
Agricultural Prices			
United States	241.0	99.6	98.1
Nebraska	247.0	100.0	100.0

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEX
Percent change February 1982 to February 1983



Source: Table 3 (page 4) and Table 4 below.

4. FEBRUARY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.4	102.8	86.9
Alliance	101.0	119.4	83.5
Beatrice	100.3	72.4	94.1
Bellevue	100.4	184.1	93.7
Blair	104.6	66.8	80.6
Broken Bow	106.5	74.7	91.4
Chadron	100.4	170.3	84.1
Columbus	99.5	69.2	92.0
Fairbury	100.9	30.1	88.9
Falls City	101.3	39.0	80.6
Fremont	101.6	104.4	77.5*
Grand Island	101.2	154.1	87.5
Hastings	96.9	138.8	81.5
Holdrege	105.3	60.3	86.5
Kearney	103.2	75.7	89.0
Lexington	101.8	83.7	71.0
Lincoln	98.0	175.6	91.3
McCook	108.5	48.0	84.7
Nebraska City	100.9	36.1	87.0
Norfolk	100.3	97.3	79.8
North Platte	91.9	106.0	82.8
Omaha	100.2	92.1	89.6
Scottsbluff/Gering	102.1	71.6	70.1
Seward	103.4	221.9	100.6
Sidney	104.5	218.3	86.9
So. Sioux City	98.9	34.4	85.1
York	103.8	82.4	89.4

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(Continued from page 3)

The foregoing carries some implications for farm asset value trends in the near future. Because the major portion of more permanent assets are owned by those not in serious financial straits, widespread asset liquidation is unlikely. Take the case of real estate. In Nebraska, nearly fifty-seven percent of the farm real estate asset value is owned by debt-free farm operators or landlords with little or no farm debt. Therefore, forced liquidation of real estate assets, due to financial pressures, is likely to remain a problem of the minority--not the majority--of real estate owners. In turn, this provides a form of economic buffer for the farmland market--reducing the farmland depreciation effects of chronic low farm income. This is not to say further asset depreciation will not occur; additional declines are certainly possible. However, the magnitude of any nominal decreases in value would probably be reduced because of most owners' financial strength.

On a final note, there is no question that major structural changes are occurring in our nation's economy. Having been so closely tied to the general inflationary and debt-expansion 'mind-set' of the 1970s, the farm sector has not been immune to such changes. The current severity of consequences is probably as much the result of bullish optimism and ill-founded presumptions concerning the future during the 1970s as it is the result of low farm incomes of the 1980s. Of course (as documented in this analysis), the impacts are not evenly distributed; furthermore, it appears that those who--either from necessity or choice--took the greatest economic chances during the past 10 years are now some of those most vulnerable to economic loss and potential foreclosure. Such is the dynamic of any economic system involving a market allocating process.

NOTES

[1] Direct comparison of financial ratios with other sectors is not feasible because of different asset valuation bases. The farm sector figures are based on revaluing assets at current prices each year, while those for manufacturing are based on book value or cost at purchase. [2]

[2] This survey was conducted by the Bureau of the Census as a supplement to the 1978 Census of Agriculture. Information collected reveals the financial profile of farm operators as of December 31, 1979. It should be noted that, because it is a survey, sampling error does exist. Therefore, there is obviously 'underreporting' of total debt; consequently, aggregate estimates are not made from this source, but rather are adopted from series maintained by USDA.

[3] Of course, in real (inflation-adjusted) terms, the decline has been even greater. On the basis of the GNP Price Deflator, the real decline was about twenty percent.

[4] As to whom constitutes this group, it is somewhat difficult to tell. However, Gessaman and Morris suggest the current financial pressures are particularly severe for operators of producing units who are (a) engaged in intensive (and extensive) cropping practices sustained by borrowed funds, or (b) heavily leveraged with recently-acquired debt at relatively high interest rates, or (c) practicing a level of financial and business management that prevents lenders from continuing or expanding current credit availability. [1]

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CASH GRAIN CROP PRODUCTION IN NEBRASKA: 1960-1981

Undoubtedly, Nebraska is a leading crop-producing state. In 1960, of the four cash grain crops—corn, wheat, sorghum, and soybeans—Nebraska ranked fifth in corn for grain production, third in sorghum for grain production, and fourth in all wheat production. By 1981, Nebraska maintained its rank in corn production, improved to third in sorghum production, and dropped to tenth in wheat production. Although the 1960 rank for soybean production was not available, Nebraska soybean production, as a percentage of United States soybean production, tripled from 1.0 percent in 1960 to more than 3.0 percent in 1980. Nebraska now ranks eleventh in soybean production among all states.

Production of these four cash crops is very important to our own state economy. It should be noted that almost forty-five percent of Nebraska's 1981 value of farm production resulted from corn, sorghum, soybean, and wheat production. Many Nebraska businesses support and are dependent upon agricultural production. For example, implement sales and service, seed, fertilizer, food processing, feedlot, transportation, grain storage, marketing, and processing of agricultural products, construction, and research activities are some of the operations which serve agriculture. It is impossible to determine exactly what proportion of Nebraska's economy is directly or indirectly related to agriculture. However, it is obvious that a sizable proportion is associated with and dependent upon agriculture.

Significant changes have occurred in production composition among these crops during the past two decades Some crops are increasingly more important to Nebraska over time than other crops. In addition, crop acreage and production have been greatly affected by agricultural technological advancements, weather conditions, and prices.

In consideration of both strong impact and production shifts of these four marketable crops, this article reviews Nebraska and United States crop production over the past two decades. Crop production data from three periods (1960-1962, 1970-1972, 1980-1982) are focused. Because any one year is not representative of actual trends, three-year intervals are used. The data, as provided by both the United States and Nebraska Departments of Agriculture, are essentially composed of three categories: acres harvested, yield/acre, and unit production. Comparisons are based upon an average production figure for each three-year period.

CORN PRODUCTION

Corn is Nebraska's most important crop in terms of bushels, acres, and value of production. Corn acres harvested per year are well over twice as much as the second largest crop, wheat. In addition, value of production of corn in 1981 makes up approximately fifty percent of Nebraska's crop value of production.

Nebraska has maintained its position as a major corn-producer in the United States in two production categories and improved in a third. When comparing Nebraska to United States production in each of the three categories (as in Table 1), Nebraska's percentages of average acres harvested and average yield/acre have remained fairly stable. However, Nebraska average production figures showed a slight improvement from 8.2 percent during the 1960-1962 period to 9.3 percent for the 1980-1982 period. Nebraska has been and remains a significant contributor to the United States production of a very important crop, corn.

Nebraska's corn production has more than doubled since the 1960-1962 period, with a percentage increase of 137.1 percent. This production rise has been fed by a dramatic average yield increase of 90.3 percent over the same period. Average acres harvested has only grown by 24.0 percent. A similar trend is found on a national scale. Although United States corn production has increased by 108.1 percent from the 1960-1962 to 1980-1982 periods, the prime force behind this rise is the 74.7 percent increase in yield.

Irrigation is a significant contributor to increased corn yields, clearly demonstrating recent agricultural technological advances. Data in Table 2 show that, from 1960 to 1981, there has been a consistent trend of additional, irrigated corn acreage. Irrigated acres harvested has more than tripled—from 1,569,000 acres in 1960 to 5,050,000 irrigated acres in 1981—whereas, non-irrigated acres declined from 4,969,000 in 1960 to 1,930,000 in 1981. During this same period, yields for both irrigated and non-irrigated corn production have increased. Of the irrigated acres harvested in 1960, yields were 79.0/acre and rose to 129.0/acre by 1981. The non-irrigated acre yields, although less than the irrigated acreage yields, showed improvement from 42.1/acre to 78.4/acre over the twenty-one year period. Growth in application of fertilizers and chemical insecticides and good management have made possible these yield improvements on both the irrigated and non-irrigated lands.

Nebraska is a significant corn-producer. Nebraska's corn yields have risen because of irrigation. In order to even improve on these production gains, we should see a continued trend of increasing irrigated acres in Nebraska.

WHEAT PRODUCTION

Although average United States wheat production increased dramatically—116.6 percent—over the 1960-1962 to 1980-1982 period, Nebraska's wheat production lags far behind that of the United States. Average Nebraska wheat production increased from 72,780,000 bushels during the 1960-1962 period to 104,733,000 bushels for the 1980-1982 period. This represents only a 43.9 percent increase, which can be explained by yield increases—not by any additional wheat acreage. Over the twenty-year period, Nebraska wheat acres harvested actually declined by 3.8 percent.

Although wheat acreage has declined, total Nebraska wheat production has increased because of improvements in yields. Advanced technology has contributed to the 50 percent increase in Nebraska's average yield/acre from 1960-1962 to 1980-1982. Yields in Nebraska have also been higher than yields nationally. During the 1970-1972 period, Nebraska yields were 20 percent greater than United States yields. In 1980-1982, Nebraska yields were 5.2 percent higher than United States yields.

Nebraska's contribution to United States wheat production is on the decline. The changing composition of crop production within Nebraska is the main cause. Nebraska's average wheat production, as percentage of United States wheat production, has shown a significant decrease from 6.4 percent to 3.9 percent. However, although Nebraska wheat is less significant on a national scope, it remains one of Nebraska's five leading cash crops, as its 1981 value of production was almost $388,000,000.

(Continued on page 2)

TABLE 1

United States and Nebraska Crop Production

	Average Acres Harvested (1,000)			Average Yield/Acre			Average Production (1,000)		
	1960-1962	1970-1972	1980-1982	1960-1962	1970-1972	1980-1982	1960-1962	1970-1972	1980-1982
Corn for grain (bu.)									
United States	62,236	59,583	73,627	60.2	85.3	105.2	3,723,424	5,088,962	7,747,924
Percentage change (70-72) to (80-82)		23.6			23.3			52.3	
Percentage change (60-62) to (80-82)		18.3			74.7			108.1	
Nebraska	5,622	5,099	6,973	54.5	88.3	103.7	304,402	451,703	721,680
Percentage change (70-72) to (80-82)		36.8			17.4			59.8	
Percentage change (60-62) to (80-82)		24.0			90.3			137.1	
Nebraska/United States (%)	9.0	8.6	9.5	90.5	103.5	98.6	8.2	8.9	9.3
All wheat (bu.)									
United States	48,946	46,180	76,946	25.	32.5	34.5	1,228,560	1,504,717	2,660,594
Percentage change (70-72) to (80-82)		66.6			6.2			76.8	
Percentage change (60-62) to (80-82)		57.2			37.5			116.6	
Nebraska	2,997	2,467	2,883	24.2	39.0	36.3	72,780	96,127	104,733
Percentage change (70-72) to (80-82)		16.9			–6.9			9.0	
Percentage change (60-62) to (80-82)		–3.8			50.0			43.9	
Nebraska/United States (%)	6.1	5.3	3.7	96.4	120.0	105.2	5.9	6.4	3.9
Sorghum for grain (bu.)									
United States	12,695	14,485	13,495	42.6	55.0	56.5	504,008	795,309	766,499
Percentage change (70-72) to (80-82)		–6.8			2.7			–3.6	
Percentage change (60-62) to (80-82)		6.3			32.6			52.1	
Nebraska	1,507	1,773	1,920	51.2	61.0	71.0	84,060	109,092	136,170
Percentage change (70-72) to (80-82)		8.3			16.4			24.8	
Percentage change (60-62) to (80-82)		27.4			38.7			62.0	
Nebraska/United States (%)	11.9	12.2	14.2	120.2	110.9	125.7	16.7	13.7	17.8
Soybeans for beans (bu.)									
United States	26,089	43,569	68,336	24.3	27.4	29.6	634,695	1,193,126	2,023,061
Percentage change (70-72) to (80-82)		56.8			8.0			69.6	
Percentage change (60-62) to (80-82)		161.9			21.8			218.7	
Nebraska	255	722	2,047	26.8	26.7	34.7	6,803	19,236	71,520
Percentage change (70-72) to (80-82)		183.5			30.0			271.8	
Percentage change (60-62) to (80-82)		702.7			29.5			951.3	
Nebraska/United States (%)	1.0	1.7	3.0	110.3	97.4	117.2	1.1	1.6	3.5

Source: *Statistical Abstract of the United States*, Annual Editions, U.S. Dept. of Commerce.

(Continued from page 1)

SORGHUM PRODUCTION

Grain sorghum or milo has emerged an important feed for the livestock industry. It is more tolerant to heat and drought than corn and, therefore, is a good dryland crop. It is not surprising that, in 1981, there were more than seven times more non-irrigated sorghum acreage than irrigated acreage.

There have been steady production gains in bushels of sorghum on both the Nebraska and United States levels. Table 1 shows that, for average acres harvested, the United States has shown a small increase of 6.3 percent and Nebraska a 27.4 percent increase for the 1960-1962 to 1980-1982 periods. Yields for Nebraska and the United States have improved, with Nebraska showing the most improvement. Nebraska's yields have been well above the national yield figures. This fact is demonstrated by the Nebraska/United States calculation under yield/acre. Nebraska yields, for the three periods, have been 20.2 percent, 10.9 percent, and 25.7 percent, respectively, above the national levels. These figures demonstrate Nebraska's superiority as an efficient grain sorghum-producer.

Although Nebraska ranks third nationally, as a grain sorghum-producer state, it has spectacularly improved its average production to almost one-fifth of United States production (17.8 percent for the 1980-1982 period). Sorghum's production improvement, unlike corn's, has been generated from increases in both acres harvested and yield/acre. Corn's great production gains over the years resulted mainly from yield increases and not increases in acres harvested. The state's climate and continued demand for sorghum should maintain and even improve this crop's position, both in Nebraska and nationally.

SOYBEANS FOR BEANS

The history for United States and Nebraska soybean production growth is spectacular for each of the three production categories in Table 1. Unlike corn production, whose growth came from dramatic yield/acre increases, soybeans have benefited from tremendous acreage increases. On the United States level, acres harvested grew from 26,089,000 during the 1960-1962 period to 68,336,000 during the 1980-1982 period—an increase of 161.9 percent. During the same period, yield/acre changed from 24.3 to 29.6 percent—only a 21.8 percent increase. Most of the 218.7 percent increase in average production can be attributed to acreage increases.

Nebraska soybean production—in terms of acres harvested and bushels produced—is truly phenomenal. Acres harvested increased by 702.7 percent from 1960-1962 to 1980-1982. This dramatic growth was due to rapid expansion in the foreign and domestic soybean oil and meal markets, declines in some small grain acreage (like oats and wheat), and a steady shift of non-irrigated corn acreage to soybeans. Average soybean production in Nebraska increased by 951.3 percent—or about ten times over the twenty-year period. This compared with a 218.7 percent increase in average production nationally, over the same period. Soybeans are be-

(Continued on page 6)

TABLE 2
Nebraska Irrigated and Non-Irrigated Crop Production

Corn for Grain

	Irrigated			Non-Irrigated		
Year	Acres Harvested (000)	Yield	Production (bushels)	Acres Harvested (000)	Yield	Production (bushels)
1960	1,569	79.0	124,016,310	4,969	42.1	209,421,690
1961	1,393	79.1	110,168,010	3,903	42.3	165,223,990
1962	1,307	86.0	112,379,330	3,830	52.5	200,977,670
1963	1,394	83.3	116,112,040	3,687	45.7	168,423,960
1964	1,340	81.4	109,125,040	2,826	39.5	111,672,960
1965	1,242	95.5	118,636,120	2,323	56.4	130,913,880
1966	1,537	104.8	161,102,800	2,563	65.1	166,897,200
1967	1,840	101.7	187,174,410	2,670	54.9	146,565,590
1968	1,965	102.9	202,248,610	2,274	49.0	111,437,390
1969	2,032	118.3	240,450,370	2,588	73.1	189,209,630
1970	2,220	109.9	244,088,000	2,585	45.0	116,287,000
1971	2,526	111.8	282,401,110	2,774	60.6	168,098,890
1972	2,487	124.1	308,603,000	2,683	85.4	229,077,000
1973	2,790	114.0	318,060,000	3,110	76.1	236,540,000
1974	3,050	103.0	314,150,000	2,650	27.7	73,450,000
1975	3,350	113.0	378,550,000	2,570	48.5	124,650,000
1976	3,800	112.0	425,600,000	2,300	40.4	92,900,000
1977	4,400	116.0	510,400,000	2,150	64.2	138,050,000
1978	4,600	125.0	575,000,000	1,950	84.7	165,150,000
1979	4,850	128.0	620,800,000	2,300	87.6	201,450,000
1980	4,950	101.0	499,950,000	2,150	48.2	103,550,000
1981	5,050	129.0	651,450,000	1,930	78.4	151,250,000

All Wheat*

	Irrigated			Total Irrigated and Non-Irrigated		
Year	Acres Harvested (000)	Yield	Production (bushels)	Acres Harvested (000)	Yield	Production (bushels)
1963	10,360	30.9	319,760	2,953,000	21.5	63,490,000
1964	16,230	32.8	532,280	2,953,000	25.0	73,825,000
1965	10,000	25.5	255,350	2,727,000	20.0	54,540,000
1966	14,280	45.6	650,910	2,945,000	35.0	103,075,000
1967	9,830	36.4	357,480	3,325,000	26.5	88,112,000
1968	6,000	39.3	236,050	3,159,000	32.0	101,088,000
1969	7,200	31.9	229,660	2,070,000	31.5	87,570,000
1970	10,300	42.3	436,110	2,558,000	38.0	97,204,000
1971	7,600	49.5	376,230	2,434,000	42.0	102,228,000
1972	8,400	46.2	388,260	2,556,000	37.0	94,572,000
1973	7,400	47.9	354,090	2,680,000	35.0	93,800,000
1974	29,600	48.5	1,435,400	2,900,000	34.0	98,600,000
1975	61,000	42.4	2,586,400	3,070,000	32.0	98,240,000
1976	79,000	40.1	3,167,700	2,950,000	32.0	94,400,000
1977	92,000	43.9	4,034,500	2,950,000	35.0	103,250,000
1978	50,000	50.0	2,500,000	2,550,000	32.0	81,600,000
1979	74,000	52.0	3,848,000	2,950,000	38.0	112,100,000
1980	66,000	52.0	3,432,000	2,850,000	38.0	108,300,000
1981	85,000	52.0	4,420,000	2,950,000	36.0	106,200,000

Sorghum for Grain

	Irrigated			Non-Irrigated		
Year	Acres Harvested (000)	Yield	Production (bushels)	Acres Harvested (000)	Yield	Production (bushels)
1960	120	78.0	9,365,780	1,676,000	48.5	81,332,220
1961	110	77.4	8,511,700	1,075,000	47.7	51,330,300
1962	190	93.4	17,745,820	1,350,000	61.0	82,354,180
1963	244	83.1	20,265,510	1,666,000	50.9	84,784,490
1964	293	84.0	24,621,100	1,732,000	40.7	70,553,890
1965	380	79.9	30,368,010	1,891,000	48.2	91,129,990
1966	314	93.5	29,368,380	1,775,000	63.5	122,683,620
1967	261	85.5	22,309,320	1,932,000	52.6	101,594,680
1968	204	87.7	17,896,160	1,550,000	54.1	83,835,840
1969	145	101.8	14,755,450	1,416,000	73.4	103,880,550
1970	130	86.9	11,300,220	1,390,000	47.6	66,219,780
1971	161	92.5	14,899,790	1,896,000	57.2	108,520,210
1972	138	92.5	12,767,800	1,619,000	70.3	113,736,200
1973	130	80.0	10,400,000	1,870,000	67.2	125,600,000
1974	143	55.0	7,866,500	1,757,000	31.2	54,833,500
1975	170	78.0	13,260,000	1,730,000	52.7	91,240,000
1976	175	79.0	13,825,000	1,925,000	55.0	105,875,000
1977	200	92.0	18,400.000	1,870,000	68.8	128,570,000
1978	165	89.0	14,685,000	1,665,000	73.6	122,565,000
1979	140	97.0	13,580,000	1,780,000	77.6	138,100,000
1980	220	83.0	18,260,000	1,810,000	57.2	103,540,000
1981	250	94.0	23,500,000	1,810,000	78.1	141,300,000

Soybeans for Beans

	Irrigated			Non-Irrigated		
Year	Acres Harvested (000)	Yield	Production (bushels)	Acres Harvested (000)	Yield	Production (bushels)
1960	7,000	35.4	248,000	157,000	27.7	4,344,000
1961	15,600	31.3	488,840	276,400	25.2	6,957,160
1962	18,500	31.8	588,710	291,400	26.7	7,781,290
1963	19,800	35.1	695,890	336,200	28.1	9,450,110
1964	26,000	30.3	786,600	497,000	22.6	11,242,400
1965	30,000	29.4	881,310	666,000	23.2	15,474,690

(Table 2 continued on page 6)

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*Data for 1960, 1961, and 1962 not available.

Review and Outlook

The level of economic activity in Nebraska dropped in March, compared to February 1983. Although three of five sectors recorded gains, the Bureau of Business Research's net physical volume index fell 2.4 percent. Compared to March 1982, the index was down 1.8 percent.

In contrast to the experience of the previous few months, activity in the agricultural sector decreased, whereas the nonagricultural component rose. The February-to-March decline in the agricultural index was 20.8 percent; increase in the nonagricultural index was 1.7 percent.

March's growth in activity in the nonagricultural sector marked the sector's first growth since last November. On a sector-by-sector basis, the changes were manufacturing, +6.9 percent; construction, +2.4 percent; distributive, +0.6 percent; and government, −0.5 percent.

Because manufacturing and construction activity have, for the past two or three years, been the state's weakest sectors, improvement in their activity is encouraging. Even with their March growth, however, these sectors still lag behind their performances of a year ago. (See Table 2)

The construction index now is beginning to reflect a pickup in residential building activity. Increases in housing starts and in building permits issued suggest that residential building will continue to gain, at least for the next few months. Construction's two other components (nonresidential building and nonbuilding) have yet to demonstrate any improvement, however.

March's manufacturing activity increase was this sector's largest in more than two years. During recent months, manufacturing employment has stabilized and begun to grow gradually. If this trend continues, as expected, the manufacturing sector also may supply the state's economy with a mild stimulus.

The distributive sector was the only sector to record any improvement over March 1982. Because this growth had been sporadic on a month-to-month basis, this sector has not been able to provide a foundation for steady growth in the state's economy.

(Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

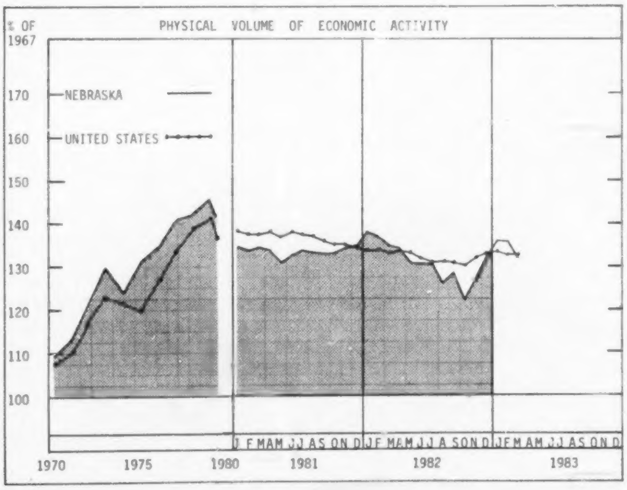
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

March, 1983	Current Month as Percent of Same Month Previous Year		1983 Year to Date as Percent of 1982 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	101.7	102.6	102.1	102.5
Agricultural	99.2	97.5	107.5	100.5
Nonagricultural	102.1	102.7	101.2	102.6
Construction	92.6	109.3	88.8	111.7
Manufacturing	87.8	92.9	84.4	92.2
Distributive	105.9	105.7	105.6	105.7
Government	107.2	105.6	107.5	105.6
Physical Volume	98.2	99.1	98.7	99.1
Agricultural	99.2	96.7	107.5	101.6
Nonagricultural	98.0	99.2	97.0	99.0
Construction	90.9	107.3	87.4	109.9
Manufacturing	86.7	92.4	83.4	91.6
Distributive	102.2	102.0	101.9	102.0
Government	99.1	99.1	99.2	99.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	366.3	368.5
Agricultural	369.4	323.8
Nonagricultural	365.6	370.0
Construction	193.5	326.8
Manufacturing	311.5	278.7
Distributive	398.1	421.1
Government	386.6	385.2
Physical Volume	132.4	132.7
Agricultural	148.4	132.2
Nonagricultural	130.0	132.7
Construction	57.2	96.7
Manufacturing	129.2	113.5
Distributive	135.7	143.5
Government	141.4	146.2

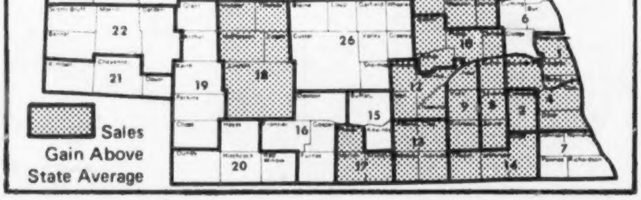


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

Region Number and City	City Sales*	Sales in Region*	
	March 1983 as percent of March 1982	March 1983 as percent of March 1982	Year to date '83 as percent of Year to date '82
The State	100.7	102.0	101.1
1 Omaha	102.8	104.9	104.0
Bellevue	116.0		
Blair	96.8		
2 Lincoln	110.0	110.0	105.8
3 So. Sioux City	97.4	103.9	103.7
4 Nebraska City	99.4	102.9	104.5
6 Fremont	112.3	108.4	101.7
West Point	104.2		
7 Falls City	103.1	101.6	102.6
8 Seward	100.3	102.2	104.3
9 York	100.1	105.2	105.7
10 Columbus	90.7	97.6	105.8
11 Norfolk	101.4	98.9	106.5
Wayne	96.1		
12 Grand Island	103.8	104.5	106.6
13 Hastings	109.4	103.3	104.0
14 Beatrice	99.6	102.1	106.7
Fairbury	107.2		
15 Kearney	105.5	103.3	103.2
16 Lexington	94.0	97.5	99.9
17 Holdrege	114.2	110.5	105.3
18 North Platte	111.0	110.5	111.1
19 Ogallala	98.8	94.0	98.4
20 McCook	105.0	99.8	99.2
21 Sidney	97.1	92.9	87.9
Kimball	81.1		
22 Scottsbluff/Gering	94.7	94.2	98.6
23 Alliance	99.0	97.6	97.3
Chadron	95.2		
24 O'Neill	99.6	95.7	94.1
25 Hartington	99.3	102.6	101.5
26 Broken Bow	106.0	101.6	101.5

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Regional totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1983 YEAR TO DATE AS PERCENT OF 1982 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(Continued from page 4)

Although the government sector recorded a decline in activity during March, it posted gains in 5 of the past 12 months. As a result, this sector is less than 1 percent below its level of a year ago.

As indicated earlier, the agricultural sector in March reversed several months of growth. The seasonally-adjusted value of cash farm marketings totaled $505.3 million in March 1983, but was down $130.9 million (25.9 percent) from February 1983; in addition, it was down $55.5 million (12.3 percent) from March 1982. Compared to February 1983, seasonally-adjusted prices received by Nebraska farmers increased by 0.8 percent but were unchanged from March 1982.

Net taxable retail sales exhibited a slight improvement during March, as sales totaled $787 million. This was up 2.0 percent from the $772 million in March 1982, on a dollar volume basis. Although this gain is encouraging, sales failed to keep pace with inflation, as measured by the commodity component of the consumer price index. This index rose 3.1 percent from March 1982 to March 1983. When retail sales were adjusted for changes in prices, they fell 1.1 percent.

The primary reason for the weakness in net taxable retail sales can be found by observing nonvehicle sales. On a dollar volume basis, these sales were up 0.7 percent; however, after adjusting for prices, they dropped 2.3 percent.

Motor vehicle sales, on the other hand, have shown continuing strength. Compared to March 1982, motor vehicle sales in March 1983 increased 12.8 percent, on a dollar volume basis. Adjusted for inflation, these sales still grew 9.5 percent.

Nebraska's major cities also began to demonstrate some improvement in retail sales, on a dollar volume basis, as 17 of 32 cities recorded gains in sales from last March. Largest increases were in Bellevue, Holdrege, Fremont, and North Platte.

Table 4 illustrates that there have been minor advances in some of the indicators of economic activity. March's 0.8 percent growth in employment, compared to March 1982, represented only the second increase in the last 12 months; the other occurred in February 1983. In all, 19 of the 26 cities exhibited improvement in employment.

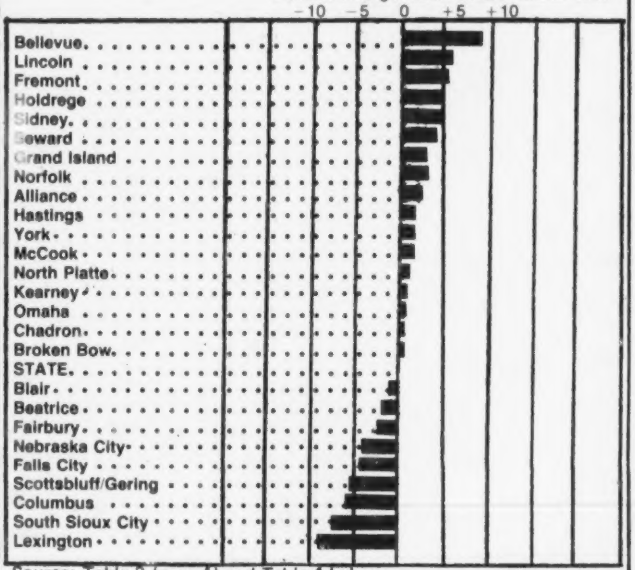
Building activity in the state's cities (as measured by the value of building permits issued and spread over an appropriate time period of construction) grew 15.4 percent from March 1982 to March 1983. This growth was not very uniform across the state, as some cities recorded sizable gains whereas others recorded substantial declines.

In relation to March 1982, the average of the city business indexes was unchanged. The moderate employment and building activity gains were offset by the decline in retail sales (after price adjustment). However, 17 of the 26 cities registered gains. Bellevue posted the largest economic activity increase, with a gain of 8.7 percent. Other cities with increases above 2.5 percent were Lincoln, Fremont, Holdrege, Sidney, Seward, Grand Island, Norfolk, and Alliance.

J.A.D.

CITY BUSINESS INDEX

Percent Change March 1982 to March 1983



Source: Table 3 (page 4) and Table 4 below.

4. MARCH CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.8	115.4	91.0
Alliance	100.7	236.1	102.5
Beatrice	101.0	77.2	92.2
Bellevue	101.7	161.3	91.4
Blair	104.5	100.7	83.9
Broken Bow	106.4	43.8	89.6
Chadron	100.2	205.9	91.2
Columbus	99.6	95.2	91.6
Fairbury	101.6	32.9	91.7
Falls City	102.1	33.6	88.4
Fremont	101.7	112.2	85.4*
Grand Island	101.0	166.6	85.6
Hastings	96.6	119.2	137.2
Holdrege	105.1	65.6	85.3
Kearney	103.3	66.6	87.6
Lexington	96.2	49.9	93.4
Lincoln	100.0	202.3	89.1
McCook	108.3	58.4	93.4
Nebraska City	101.1	51.6	85.9
Norfolk	99.5	235.1	96.2
North Platte	93.5	118.1	92.1
Omaha	101.5	95.9	93.2
Scottsbluff/Gering	102.0	56.2	78.2
Seward	102.0	239.7	88.0
Sidney	103.9	280.5	96.1
So. Sioux City	99.4	37.1	88.3
York	103.3	146.7	91.9

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

March, 1983	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	293.4	103.6	103.6
Commodity component	266.7	103.1	103.0
Wholesale Prices	300.5	100.8	100.8
Agricultural Prices			
United States	245.0	100.8	99.0
Nebraska	249.0	100.0	100.0

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

(Table 2, cont'd.)

Year	Irrigated: Acres Harvested (000)	Irrigated: Yield	Irrigated: Production (bushels)	Non-Irrigated: Acres Harvested (000)	Non-Irrigated: Yield	Non-Irrigated: Production (bushels)
1966	40,500	34.3	1,390,300	704,500	29.2	20,587,700
1967	36,000	31.0	1,114,290	746,000	22.1	16,480,710
1968	55,500	33.3	1,846,900	726,500	22.8	16,530,100
1969	51,800	40.2	2,084,120	714,200	33.0	23,576,880
1970	64,000	34.8	2,227,560	748,000	20.9	15,636,440
1971	30,000	34.9	1,048,000	579,000	24.5	14,177,000
1972	39,000	37.2	1,451,000	707,000	32.8	23,167,000
1973	102,000	36.5	3,725,100	1,108,000	29.4	32,574,900
1974	100,000	32.7	3,272,300	1,090,000	22.7	24,692,700
1975	100,000	33.7	3,370,000	1,100,000	26.4	29,030,000
1976	70,000	34.0	2,380,000	910,000	18.9	17,220,000
1977	100,000	40.0	4,000,000	1,030,000	35.6	36,680,000
1978	115,000	39.0	4,485,000	1,135,000	33.5	38,015,000
1979	195,000	40.0	7,800,000	1,415,000	33.2	46,940,000
1980	315,000	39.0	12,285,000	1,455,000	28.1	40,815,000
1981	385,000	46.0	17,710,000	1,735,000	37.4	64,970,000

Source: *Nebraska Agricultural Statistics*, individual annual reports 1960-1981, Nebraska Department of Agriculture.

(Continued from page 3)

coming a prominent, significant cash crop to Nebraska and also to the United States.

Nebraska's present position as a soybean-producer, in relation to other states, is not strong. However, there is no doubt that, if soybean demand increases, Nebraska will continue its spectacular soybean growth pattern.

CROP COMPOSITION

Information in Table 3 demonstrates composition of production shifts among these crops. Total harvested acres for the four marketable crops increased 33.2 percent—from 10,381,000 acres in the 1960-1962 period to 13,823,000 acres in the 1980-1982 period. These figures indicate that, over the twenty-year period, a greater proportion of Nebraska's agricultural acreage was allocated to these four cash crops. Half of this rise can be explained by soybean acreage, which increased by 1,792,000 acres in twenty years.

The proportion of acreage allocated to corn and sorghum production remains fairly stable. Corn declined from 54.2 percent in 1960-1962 to 50.7 percent in 1970-1972, but leveled off during the 1980-1982 period to 50.4 percent. Sorghum proportional acreage varies from 14.5 percent to 17.6 percent and then declines to 13.9 percent for each of the three periods, respectively.

In comparison, a strikingly contrasting picture is demonstrated by soybean and wheat acreage. By 1980-1982, soybean acreage totaled almost fifteen percent of total acres harvested, compared to an insignificant 2.4 percent share in 1960-1962. Conversely, wheat's share declined almost twenty-eight percent over the same period—dropping from 28.9 percent in 1960-1962 to 20.9 percent in 1980-1982. Wheat's impact on Nebraska's total crop acreage is not as strong as it once was. However, at the same time, soybeans' importance grew phenomenally.

Nebraska's crop production has undergone significant changes in the past twenty years. Generally, corn, sorghum, and soybean production have rapidly expanded (both in acres harvested and in yield), with soybeans emerging as a major Nebraska cash crop.

DANIEL E. VETTER

TABLE 3

Average Acres Harvested (thousands)

	1960-1962	Percent of Total	1970-1972	Percent of Total	1980-1982	Percent of Total
Wheat	2,997	28.9	2,467	24.5	2,883	20.9
Corn	5,622	54.2	5,099	50.7	6,973	50.4
Sorghum	1,507	14.5	1,773	17.6	1,920	13.9
Soybeans	255	2.4	722	7.2	2,047	14.8
TOTAL	10,381	100.0	10,061	100.0	13,823	100.0

Source: *Nebraska Agricultural Statistics*, individual annual reports 1960-1981, Nebraska Department of Agriculture.

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Business in Nebraska

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VARIATIONS IN NEBRASKA'S ECONOMIC STRUCTURE: 1959/1962 – 1979/1980

This article examines economic activity shifts in Nebraska over a twenty-year period. Data on farm income, manufacturing earnings, and wages and salaries were examined because they are Nebraska's major income sources. To develop an idea as to which sector is paying most in income taxes to the state, the information gained from reviewing these three sectors is compared to individual county tax liabilities (per capita).

The study focuses on personal earnings data because these date are available, by sector, on a county basis. Personal earnings (also called total labor and proprietors' income by place of work) consist of wages and salaries payments, other labor income, farm and nonfarm proprietors' income, and contributions for social insurance. It excludes property income interest, rents, and dividends; transfer payments; and corporate profits and corporate income taxes. The Bureau of Economic Analysis estimates farm wages and salaries by cash and pay-in-kind payments to hired farm labor and by corporate farms officers' salaries. They do not include payment to contract farm labor. Wages and salaries data consist of payments to employees, plus other compensations. Due to their sizable weight in total income flows, they impart much reliability to aggregate income estimates.

Although personal income does not reflect all of an area's economic activity, these data are the best available measures of economic activity at the county level. However, personal income data for small areas, such as counties, must be used with caution. These data are easily influenced by unusual conditions which may be temporary, such as an excellent harvest, a major construction project, or a catastrophe. Agriculture, the major sector in many Nebraska counties, is also the most volatile and difficult-to-measure component of personal income. This volatility is due not only to changes in outputs, but also to dramatic price changes.

For these reasons, no single year can adequately reflect a county's economic situation. To smooth out the short-term fluctuations—while maintaining the data's integrity—this article's analysis is based upon yearly averages. Economies of Nebraska's counties will be analyzed by focusing on their personal earnings during two periods: the average earnings of 1959 and 1962 (1959/1962) and of 1979 and 1980 (1979/1980) for manufacturing, farming, and wages and salaries.

This report ranks the top ten and bottom ten counties for the two time periods—based on the percent of each sector's earnings to the counties' total earnings—in order to identify economic activity shifts in Nebraska. These measures demonstrate the relative rather than the absolute size of the sector within a county. Included in these tables, for comparison purposes, are the state's average earnings ratios. It must be noted that the number of counties selected was arbitrarily chosen to observe the economic shifts during the twenty-year period. Fifteen, twenty, or all of the counties could have been ranked, but ten is a reasonable and manageable number.

MANUFACTURING

A substantial change has occurred in the top ten Nebraska counties for the manufacturing earnings-to-total earnings ratio from 1959/1962 to 1979/1980. Six new counties, not on the earlier list, appear in the 1979/1980 top ten. Only Saline, Dawson, Platte, and Dodge counties repeated. Dakota County, with its large Iowa Beef packing plant, was not ranked in the top ten in 1959/1962, but has the number one ranking in 1979/1980. Colfax County, with Spencer Foods, was unranked in the 1959/1962 top ten, but it is fourth in 1979/1980. The industry growth in Norfolk can explain Madison County entering the 1979/1980 top ten. Spillover into Stanton County, from four of the top ten manufacturing counties which surround it, may account for Stanton's emergence as the number two county in the 1979/1980 top ten.

Figures 1 and 2 (page 3) show how manufacturing earnings are being more widely disseminated. The manufacturing sector base in 1959/1962 (Figure 1) appears to have spread out to surrounding counties in the 1979/1980 graphic (Figure 2). In the early period, only eight counties were above the state average of manufacturing earnings to total labor and proprietors' income by place of work. In the 1979/1980 period, however, 24 counties had manufacturing-to-total earnings percentages above the state average. Also, Table 1 (page 2) shows that the 1979/1980 top ten counties had higher concentrations of manufacturing-to-total earnings than 1959/1962. As one indication of this, eighth-ranked Madison (24.9 percent) in 1979/1980 would have been the third-ranked county on the earlier list. This increase of significance for personal earnings in the manufacturing sector can be identified as an important reason why Nebraska has suffered more from the most recent recession than from past national recessions—even though the state average has remained virtually unchanged.

An examination of the bottom ranks in manufacturing for 1959/1962 shows 11 counties with zero earnings. Banner, Loup, McPherson, and Wheeler again showed zero manufacturing earnings in the later period. The data indicate that—although manufacturing has become an important earnings source in numerous Nebraska counties—in more than half of the 93 counties, the manufacturing sector currently plays a very small role (less than 10 percent) in their total earnings.

Continued on page 2

TABLE 1
Ranking of Nebraska Counties by Relative Earnings

Manufacturing

1959/1962 Top 10 County	Percent of Earnings	1979/1980 Top 10 County	Percent of Earnings
Platte	40.2	Dakota	59.7
Dodge	25.7	Stanton	44.5
Douglas	24.2	Saline	43.8
Dawson	21.6	Colfax	43.8
Saline	21.2	Dawson	[illegible].6
Hall	18.6	Platte	33.1
Garden	17.6	Dodge	29.3
Nuckolls	16.7	Buffalo	25.5
Otoe	15.2	Madison	24.9
Gage	14.6	Johnson	22.4
Nebraska	16.5	**Nebraska**	16.4

1959/1962 Bottom 10* County	Percent of Earnings	1979/1980 Bottom 10 County	Percent of Earnings
Arthur	0	Banner	0
Banner	0	Loup	0
Blaine	0	McPherson	0
Gosper	0	Wheeler	0
Grant	0	Perkins	.4
Hooker	0	Franklin	.4
Logan	0	Howard	.5
Loup	0	Harlan	.9
McPherson	0	Greeley	1.0
Sioux	0	Boone	1.0
Wheeler	0		

Note: Manufacturing data for some counties are unavailable.
*11 counties tied at 0.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Continued from page 1

FARM EARNINGS

The farm sector is an important earnings source for many Nebraska counties. The rankings for both periods are summarized in Table 2. Five counties drop out of the top ten from 1959/1962 to 1979/1980. Stanton County's disappearance from the 1979/1980 top ten can be explained by its growth in manufacturing earnings. The other four counties hold a relatively close position to the top ten.

Besides the substantial change in the top farm counties over the twenty-year period, other noteworthy trends exist. One such observation is that farm counties appear to remain farm counties. The 1959/1962 data have 84 counties with farm earnings ratios higher than the Nebraska state average of 14.8 percent; the 1979/1980 data have 80 counties higher than the state average of 7.3 percent. The drop in farm earnings-to-total earnings in Nebraska over the two periods is more than 50 percent. Following the state trend, the earnings percentage for the top ten counties in the farm sector for 1979/1980 was down from the earlier period. This decline is indicative of the diversification in state personal earnings away from the farm sector that Nebraska has experienced over that time span.

The bottom ten rankings for the 1959/1962 averages and the 1979/1980 averages had six counties repeat: Douglas, Sarpy, Lancaster, Hall, Adams, and Lincoln. These counties have relatively more population than the rest of Nebraska. Interestingly, the 1959/1962 average of Dodge County had a 15 percent farm earnings ratio for the tenth portion in the bottom ten, whereas Seward County had a farm earnings ratio of only 3.6 percent in the tenth position in the bottom ten 1979/1980 averages.

WAGES AND SALARIES

The top ten positions of wages and salaries earnings-to-total earnings are very consistent across the time period. Table 3 (page 3) shows seven counties which repeat in the rankings. Of the 1959/1962 top ten, only the first four counties would have placed in the 1979/1980 top ten, which indicates that wages and salaries increased in importance over the twenty years. The state average also increased from 71 percent to 78 percent during the period. However, only 9 counties were above the state average in 1959/1962 and only 11 counties above the 1979/1980 figures. Thus, the

Continued on page 3

TABLE 2
Ranking of Nebraska Counties by Relative Earnings

Farm

1959/1962 Top 10 County	Percent of Earnings	1979/1980 Top 10 County	Percent of Earnings
Loup	79.2	McPherson	64.5
Hayes	78.6	Wheeler	64.4
Sioux	72.2	Arthur	61.9
Wheeler	68.4	Hayes	59.5
Gosper	67.3	Banner	59.1
Arthur	64.5	Sioux	57.1
Keya Paha	64.2	Dundy	49.6
Banner	63.1	Blaine	49.6
Stanton	62.7	Perkins	49.6
Polk	59.1	Pierce	48.5
Nebraska	14.8	**Nebraska**	7.3

1959/1962 Bottom 10 County	Percent of Earnings	1979/1980 Bottom 10 County	Percent of Earnings
Douglas	1.0	Douglas	.2
Lancaster	1.8	Sarpy	.5
Sarpy	3.9	Lancaster	.8
Adams	6.3	Hall	1.5
Hall	9.5	Dawson	2.0
Gage	9.9	Buffalo	2.4
Red Willow	12.1	Dakota	2.5
Lincoln	12.6	Adams	2.9
Madison	14.3	Lincoln	3.0
Dodge	15.0	Seward	3.6

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Continued from page 2

top ten rankings dominate the state averages, and the wages and salaries earnings ratio is far less significant to the other counties, which constitute about 88 percent of Nebraska counties.

The bottom ten wages and salaries earnings ratios for the two periods identify only two counties that are consistently ranked: Loup and Cedar. A comparison of the ratios for the tenth county from the bottom in 1959/1962 and 1979/1980 shows that wages and salaries as a percent of total earnings increased from 34 percent in Sioux County to 46 percent in Antelope County. This means that there has been an increase in the importance of the wages and salaries earnings over the last two decades in both the high and low rankings.

SUMMARY OF SECTORS

Surveying across Tables 1, 2, and 3, some consistencies can be noted. No county which placed in the top ten of the farm earnings ratio in either time period is also in the top ten of the other two sectors: manufacturing or wages and salaries. The same is true for the two bottom ten rankings. There is no instance in which a county goes from a top ten ranking to a bottom ten among the three areas or across the two time periods.

There are consistencies within the two time periods between the manufacturing and wages and salaries sectors. Four counties appear in the 1959/1962 top ten of manufacturing and wages and salaries earnings ratios: Platte, Douglas, Hall, and Gage. Five counties—Gosper, Hooker, Loup, McPherson, and Sioux—are in both bottom tens for the same period. In the 1979/1980 averages, three counties repeated in the top ten: Dakota, Colfax, and Buffalo. In the 1979/1980 bottom ten, Loup, Perkins, Harlan, and Boone counties consistently appeared. Only Loup County (which appeared in the bottom ten of manufacturing and wages and salaries in both time periods) was consistent across time and rankings.

Continued on page 6

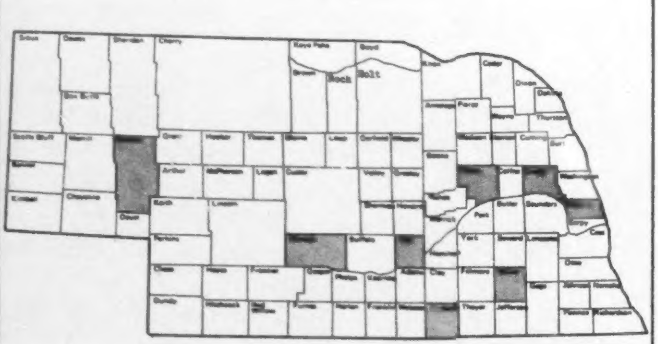
TABLE 3
Ranking of Nebraska Counties by Relative Earnings
Wages and Salaries

1959/1962 Top 10		1979/1980 Top 10	
County	Percent of Earnings	County	Percent of Earnings
Sarpy	88.7	Sarpy	91.4
Grant	85.0	Lincoln	84.8
Douglas	84.6	Douglas	84.3
Lancaster	84.5	Hall	83.7
Gage	74.6	Lancaster	83.6
Adams	74.2	Dakota	82.5
Lincoln	73.8	Adams	80.9
Dakota	73.7	Buffalo	80.1
Hall	73.6	Seward	79.9
Platte	71.0	Colfax	79.3
Nebraska	71.1	**Nebraska**	78.3

1959/1962 Bottom 10		1979/1980 Bottom 10	
County	Percent of Earnings	County	Percent of Earnings
Loup	21.5	Harlan	26.2
Hayes	25.2	Sherman	30.7
Hooker	27.7	Loup	31.3
McPherson	28.7	Pierce	40.3
Gosper	28.8	Perkins	41.8
Cedar	30.3	Dundy	43.2
Polk	31.2	Cedar	44.1
Butler	31.8	Boyd	44.8
Stanton	33.4	Boone	44.9
Sioux	33.7	Antelope	45.8

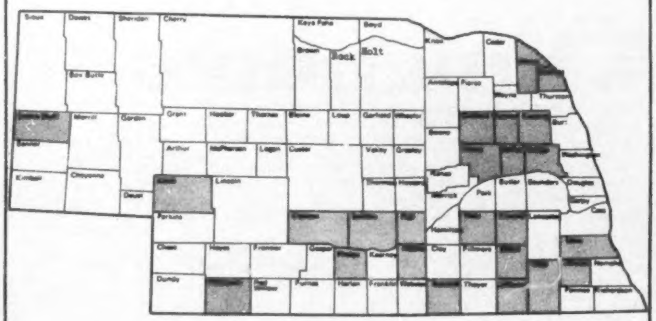
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Figure 1
Counties Above Nebraska 1959/1962 Average in Ratio of Manufacturing Earnings-to-Total Earnings



Note: Shaded counties are above the Nebraska average.

Figure 2
Counties Above Nebraska 1979/1980 Average in Ratio of Manufacturing Earnings-to-Total Earnings



Note: Shaded counties are above the Nebraska average.

Review and Outlook

Nebraska's net physical output declined 2.6 percent March-April 1983. Increases in the construction and manufacturing sectors were more than offset by declines in agricultural and distributive trade.

The Bureau of Business Research's net physical volume index for agriculture declined 14.4 percent on a month-to-month basis. Cash farm marketings in April 1983 were $108.3 million below the same period of one year ago. On a seasonally-adjusted basis, April 1983 receipts were 19.0 percent below April 1982. Nebraska's decline in cash farm marketing receipts far outpaced the 6.3 percent decline recorded nationally. Agricultural prices received by Nebraskans were up 1.2 percent in April 1983 compared with one year earlier, an encouraging sign.

The Nebraska economy's nonagricultural sector declined 0.6 percent March-April 1983, whereas its distributive trade sector overshadowed small gains in manufacturing and government and a rather sizable gain in the construction sector. The distributive trade index declined 2.0 percent on a month-to-month basis.

Construction recorded a 12.3 percent gain in April. The construction index was estimated 64.3 percent in April 1983 (1967 = 100). April 1983's reading was above the reading recorded one year previous and was the index's highest value since November 1982.

Nebraska's manufacturing sector recorded a slight increase in

Continued on page 5

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

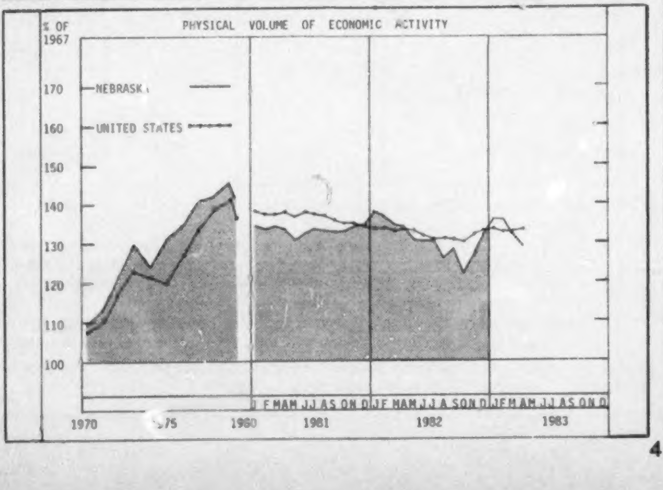
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

April, 1983	Current Month as Percent of Same Month Previous Year		1983 Year to Date as Percent of 1982 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	100.1	103.5	101.6	102.8
Agricultural	82.1	93.7	101.2	99.2
Nonagricultural	103.1	103.8	101.7	103.0
Construction	111.0	109.7	93.9	111.3
Manufacturing	92.5	95.4	86.4	93.0
Distributive	104.5	106.4	105.3	106.0
Government	109.3	105.6	107.8	105.6
Physical Volume	96.1	99.8	98.0	99.4
Agricultural	81.1	92.2	101.0	99.6
Nonagricultural	98.8	100.1	97.5	99.4
Construction	108.7	107.4	92.3	109.5
Manufacturing	91.4	94.8	85.3	92.4
Distributive	100.6	102.4	101.6	102.2
Government	100.5	99.2	99.4	99.3

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	359.7	373.5
Agricultural	321.1	356.1
Nonagricultural	365.4	374.0
Construction	218.0	330.2
Manufacturing	314.0	281.9
Distributive	393.2	426.4
Government	393.4	386.7
Physical Volume	128.9	133.9
Agricultural	126.9	143.0
Nonagricultural	129.2	133.6
Construction	64.3	97.4
Manufacturing	130.1	114.8
Distributive	133.1	144.3
Government	143.2	146.2

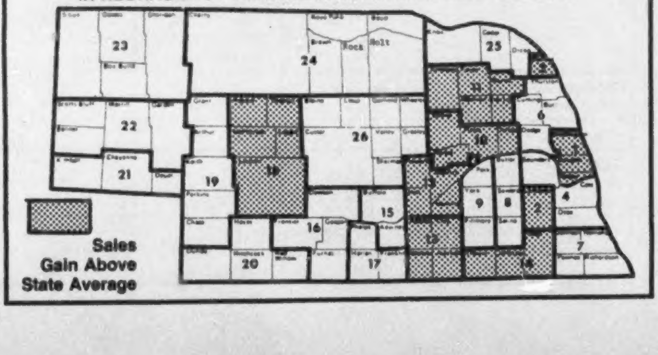


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

Region Number and City	City Sales*	Sales in Region*	
	April 1983 as percent of April 1982	April 1983 as percent of April 1982	Year to date '83 as percent of Year to date '82
The State	93.8	95.3	99.4
1 Omaha	100.9	100.9	103.1
Bellevue	93.5		
Blair	91.6		
2 Lincoln	99.0	100.1	104.1
3 So. Sioux City	95.3	102.4	103.3
4 Nebraska City	97.9	94.6	101.6
6 Fremont	95.2	96.9	100.3
West Point	89.8		
7 Falls City	95.1	90.9	99.1
8 Seward	87.1	93.8	101.3
9 York	86.2	90.9	101.3
10 Columbus	93.1	93.0	102.0
11 Norfolk	95.4	92.3	102.3
Wayne	97.8		
12 Grand Island	97.0	96.8	103.7
13 Hastings	103.6	99.2	102.7
14 Beatrice	102.6	96.8	103.8
Fairbury	100.6		
15 Kearney	98.4	95.6	100.8
16 Lexington	93.5	90.1	97.1
17 Holdrege	75.4	80.0	96.8
18 North Platte	88.7	93.6	105.7
19 Ogallala	100.4	91.2	96.4
20 McCook	97.6	101.0	99.8
21 Sidney	99.1	93.0	89.2
Kimball	82.2		
22 Scottsbluff/Gering	86.3	87.9	95.5
23 Alliance	111.2	104.4	99.2
Chadron	117.4		
24 O'Neill	96.2	94.3	94.2
25 Hartington	93.5	96.7	100.2
26 Broken Bow	94.9	96.2	100.0

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Regional totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1983 YEAR TO DATE AS PERCENT OF 1982 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



Continued from page 4

physical output. The manufacturing component was up 0.7 percent March-April 1983. The index was estimated at 130.1 (1967 = 100). Although manufacturing recorded a slight increase in April, the index suggests that Nebraska's manufacturing output is well below 1981 and 1982 levels. For purposes of comparison, the index was estimated at 142.5 in April 1982 and 162.9 in April 1981. April's increase represents the second consecutive monthly gain in the manufacturing component, an encouraging but insufficient number of monthly increases to be labeled a trend, at this point.

The government component of the Bureau's index recorded a 1.8 percent increase on a month-to-month basis. This index was estimated at 143.2 in April 1983, little changed from 1981 and 1982 levels.

Nebraska's retail sales recorded a 4.7 percent decline in April 1983, compared with one year previous. When adjusted for price changes, retail sales were down 8.3 percent. The commodity component of the consumer price index was used to adjust Nebraska's retail sales. This component was up 4.0 percent in April of 1983 from the April 1982 level.

Nonmotor vehicle retail sales declined 6.2 percent in April 1983; when adjusted for price changes, they were down 9.8 percent.

Sales of motor vehicles increased 8.9 percent in April 1983 on an unadjusted basis—but only 4.7 percent after adjustments for price changes.

Total retail sales in April 1983 were $795 million, compared with $835 million one year previous. Motor vehicle sales were estimated at $90.6 million in April 1983, compared with $83.2 million one year previous; nonmotor vehicle sales were estimated at $705 million in April 1983, compared with $751 million in April 1982.

Alliance, Chadron, Norfolk, Sidney, Broken Bow, Blair, and Lincoln recorded gains in their respective city business indexes. Retail sales and building activity were particularly strong in Alliance and Chadron. Alliance recorded retail sales gains of 11.2 percent over the previous year, while Chadron recorded a 17.4 percent increase in retail sales in April of 1983. Building activity in Norfolk, Sidney, and Lincoln was substantially responsible for the increase in their respective city business indexes.

D.E.P.

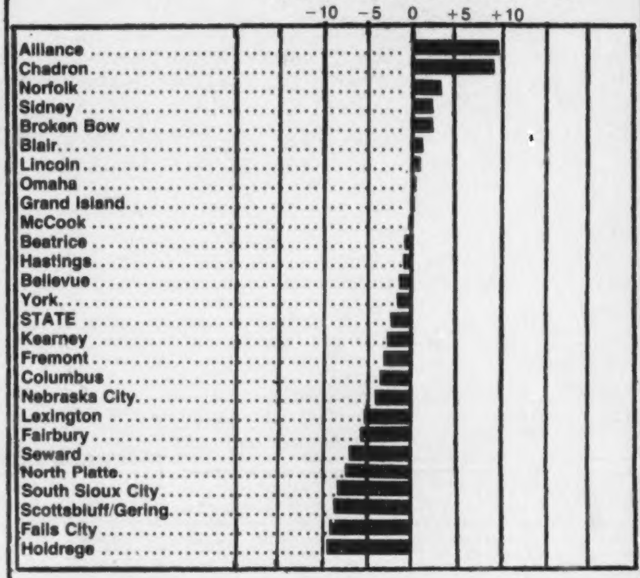
5. PRICE INDEXES

April, 1983	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	295.5	103.9	103.7
Commodity component	269.2	104.0	103.3
Wholesale Prices	300.8	100.9	100.8
Agricultural Prices			
United States	249.0	101.6	99.7
Nebraska	253.0	101.2	100.3

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEX

Percent Change April 1982 to April 1983



Source: Table 3 (page 4) and Table 4 below.

4. APRIL CITY BUSINESS INDICATORS

The State and its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	101.6	129.0	105.0
Alliance	100.0	381.6	111.9
Beatrice	102.1	82.4	123.1
Bellevue	102.4	151.2	112.7
Blair	104.9	250.7	92.0
Broken Bow	106.8	206.8	118.1
Chadron	100.1	211.7	96.0
Columbus	101.7	95.6	112.5
Fairbury	100.0	42.0	111.5
Falls City	102.1	25.9	103.1
Fremont	99.8	107.3	89.3
Grand Island	102.3	151.6	86.1
Hastings	97.3	114.6	175.4
Holdrege	106.4	90.2	106.9
Kearney	103.9	61.6	103.8
Lexington	103.7	61.3	96.3
Lincoln	100.2	197.0	106.8
McCook	108.9	74.3	113.0
Nebraska City	102.8	51.7	109.5
Norfolk	101.0	377.5	108.8
North Platte	93.4	158.5	103.9
Omaha	102.2	114.9	110.4
Scottsbluff/Gering	103.0	55.9	92.2
Seward	103.0	79.7	114.7
Sidney	105.0	168.3	117.5
So. Sioux City	99.5	36.1	106.7
York	104.7	222.2	104.6

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

Continued from page 3

INCOME TAXES

With regard to Nebraska economic activity, similarities can be observed between county tax contributions (Table 4) and each of the three sectors covered in this article—manufacturing, farm, and wages and salaries. This examination shows how the three sectors figure into the payment of income taxes. Table 4 ranks counties according to their per capita average individual income tax liability for 1979. The statistical data was compiled from the Nebraska Individual Income Tax Return, Form 1040N, as submitted by taxpayers. The amounts shown are liabilities before applicable tax credits or surcharges. It is significant that these comparisons are based only on the 1979/1980 personal earnings rankings per sector.

Tables 2 and 4 show counties with high proportion of farm income and are listed as having low tax liabilities. The top four 1979/1980 farm income counties (Table 2) are in the bottom ten tax list (Table 4). These counties include McPherson, Wheeler, Arthur, and Hayes. No counties with high proportion of personal earnings in the farm sector appear in the top ten taxpayers' list. This is not unexpected, as these taxes are paid on net income, and net farm income is consistently below that of other sectors.

On the other hand, some counties with a relatively high proportion of manufacturing and wages and salaries income appear in the top ten rank for tax liabilities. Dodge County is in the top ten for manufacturing income and in the top ten for tax liabilities. Douglas County was in the top ten for wages and salaries income and in the top ten for tax liabilities. Sherman County was in the bottom ten for wages and salaries and in the bottom ten for tax liabilities. An exception to this pattern is Sarpy County, which ranks first in the top ten for wages and salaries; yet, it is in the bottom ten for tax liabilities. The large role of the military payrolls in Sarpy County may create some distortion in the data. The main point is that counties with a high proportion of wages and salaries income are more likely to pay more taxes than counties with a low ratio.

TABLE 4
Per Capita Average Individual Income Tax Liability for 1979*

Top 10		Bottom 10	
Hamilton	234.9	Hayes	54.7
Grant	225.8	Wheeler	62.4
Douglas	201.7	Stanton	64.7
Phelps	193.2	Sarpy	74.4
Box Butte	189.0	Sherman	76.2
Dodge	185.9	Keya Paha	76.3
Kimball	181.7	Arthur	78.1
York	176.8	McPherson	85.2
Kearney	176.6	Pawnee	92.9
Fillmore	175.7	Dixon	93.4

Nebraska County Average $157.2

Note: 23 counties above the average.
*Population data used for this analysis are those reported in the *Bureau of the Census Population Report*, Series P-26.

Source: *Nebraska Department of Revenue 1980 Annual Report*, Table 3, page 23.

CONCLUSION

In order to observe the changes in Nebraska's economic structure over the last twenty years, this study has placed the counties of Nebraska into two ranks (top ten and bottom ten) for two time periods (1959/1962 and 1979/1980) in three income categories. Manufacturing earnings, farm income, and wages and salaries (the major sources of income for Nebraska counties), as a percent of each counties' total earnings, were examined to identify shifts of economic activity in Nebraska.

A significant change in manufacturing counties occurred; they tended to spread out more widely across the state. Overall, farm counties appeared to remain farm counties. The top ten counties in wages and salaries were consistent in that they changed very little.

When comparing the three sectors with income taxes paid to the state, the data indicate that counties with a relatively high proportion of manufacturing or wages and salaries income have a relatively high liability. Thus, the type of earnings a county has indicates the importance of the county, in terms of its revenue from income taxes, for the state.

JOHN WINGENDER

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Business in Nebraska

Prepared by the Bureau of Business Research
College of Business Administration

The Economics of Small Farms*

Secretary of Agriculture Bob Bergland elevated "structure" to center stage in the farm policy debate during the Carter Administration. The debate dealt with questions of desirable size, number, type, tenure, and legal organization of farms; as well as with market conduct and performance of firms dealt with by farmers in their buying and selling activities [1]. The farm structure issue has been muted within the Reagan Administration, but continues among the various publics concerned with agriculture. The issue is likely to reemerge on the future political agenda.

A central issue in the structure debate is the role of the small farm in American agriculture. In this article I take as hypotheses to be tested the following more or less conventional assertions concerning small farms:

1) Small farms provide a higher quality of life to operators and their families than do larger farms.

2) Small farm operators take better care of their soil than do larger farm operators.

3) Small farms are more energy efficient than larger farms.

4) Small farm preservation and encouragement avoids the trauma of outmigration of farm people to cities.

5) Society would be better off if publicly supported research and extension education were focused on small farms.

6) Federal government programs have hastened the demise of small farms.

7) Small farms provide the social and economic support necessary to maintain vitality of nearby towns and cities.

8) Preservation of small farms is essential to economic competition because it avoids concentration of production on a few large farms which would practice monopoly pricing and raise food costs.

For purposes of this analysis, small farms are defined, unless otherwise indicated, as units with crop and livestock receipts of under $40,000 per year. In 1981, farms with $20,000 to $40,000 in sales averaged $360,000 in assets (excluding dwelling) and about 135 hectares [2]. However, assets and hectares vary widely within sales classes from, for example, intensive cattle feedlot operations in the Texas Panhandle to extensive cattle ranching operations in Nevada.

Evaluation of Hypotheses

Small farms provide a higher quality of life. Coughenour and Christenson [3] empirically examined the "small is beautiful" thesis by relating farm size to attitudes about personal well-being, community well-being, and perceived adequacy of community services. They found no evidence that small farmers were more satisfied than large farmers with their personal life, with the social aspects of community life, or with the social services available to them. Small differences that did emerge from the study suggest that farmers on commercial, family-size units with sales of $40,000 or more expressed a higher level of perceived well-being than did small-scale farmers.

On the basis of a detailed study of approximately 800 rural families in Iowa and North Carolina from 1970 to 1972, Harper and Tweeten [4] found that income, occupation, education, and age were the principal determinants of personal well-being. Early studies [5] revealed that persons on small, low-income farms were characterized by anomie—feelings of alienation, demoralization, and pessimism. It seems likely that anomie prevalent on small farms is more the product of low income than of small farm size per se. Able-bodied, full-time operators of small farms have a high incidence of low income, and it is difficult to separate positive feelings of independence and pride of ownership of a small farm from negative feelings arising from poverty and underemployment. Small farms with sales of $20,000 to $40,000 per year received operator-family labor income from farming that averaged less than $4000 per year from 1975 to 1981; smaller farms received even less.

If full-time small farms are providing a low quality of life, we should observe a mass exodus from these farms or a shift of operators from full-time to part-time status. That adjustment is precisely what we observe in Fig. 1, which shows trends for U.S. farms with sales of $2500 to $20,000 per year [6]. The upper graph indicates that continuation of the 1959–1969 or 1959–1974 trends would leave no full-time, able-bodied small farm operators by the early 1980's. With stability or growth in numbers of small farms with aged operators (lower graph) and part-time operators (middle graph) and with stability or small decline in the number of small farms with full-time, able-bodied heads, the number of small farms can be expected to grow—a turnaround apparent in the *1978 Census of Agriculture* data [7]. The additional small farms in 1978 are not back-to-nature subsistence operations but are an extension of the urban-industrial process to the farm as evidenced by the dominance of part-time operations.

In short, small is beautiful mostly for farm operators who have substantial income from off-farm sources.

Operators of small farms and owner-operators take better care of their soil than do other farmers. Studies prior to 1960 indicated that soil conservation was inhibited by crop share leasing arrange-

(Continued on page 2)

***This is a condensed version of the article which appeared in *Science*, vol. 219, no. 4588, pp. 1037-1041, 4 March 1983. Copyright 1983 by the American Association for the Advancement of Science.**

(Continued from page 1)

ments, small farm size, low income, high time discount rate, and owner resistance to cooperation [*8*].

In a recent and far more comprehensive study, Lee [*9*] analyzed merged data from 37,000 completed land ownership questionnaires, providing basic data reliable for the nation and for individual states on land use, land quality, potential cropland, and erosion. The results revealed no significant differences nationally in mean soil losses on cultivated cropland among different types of farms as measured by legal organization. In none of the ten regions of the United States did average rates of erosion by nonfamily corporations exceed those of other types of ownership. In the Southeast region, family ownerships averaged 14.3 metric tons more soil loss annually per hectare than did nonfamily corporations. Almost 57 percent of land owned by nonfamily corporations in this region was operated with soil-conserving minimum tillage or residue practices, whereas only 36 percent of land owned by families used these practices. Yet the need for conservation practices as measured by erosion hazards was as great or greater on land owned by families.

Nationally, Lee's analysis did not reveal significant differences in soil erosion rates on cultivated cropland among noncorporate tenure groups. For those who operated only land that they owned, higher income levels were associated with lower rates of erosion both nationally and within five out of ten regions of the United States.

In a subsequent extensive analysis covering the nation, Lee and Stewart [*10*] found that 44 percent of full-owner operators used minimum tillage on cultivated cropland as opposed to 52 percent of part owners and 51 percent of nonoperator landlords. Nationally, only 40 percent of farms with under 57 hectares compared to 47 percent of farms with 57 to 284 hectares and 61 percent of farms with over 284 hectares employed minimum tillage on cultivated cropland.

The above studies did not examine environmental impacts of chemical pesticides and fertilizers. The lower total input cost per dollar of output on large farms is partly due to greater use of chemicals. Although chemical use could be reduced under proper management without loss of yields, a large reduction in chemicals or major increase in the proportion of farmland operated by small farmers with current efficiency would reduce productivity and require extension of cropland to erosion-prone soils to maintain food output.

In short, the foregoing results gave no basis to conclude that tenants have more soil losses than full- or part-owner operators. Small farms and low income, often associated with the small farms, are factors in poor soil conservation practices.

Small farms are more energy efficient than large farms. Estimates from the *1974 Census of Agriculture* of total cost of petroleum fuels for the farm business, of commercial fertilizer, and of weedicides and pesticides ranged from 6 cents per dollar of farm sales on farms with gross receipts of over $500,000 to 24.5 cents per dollar of sales on farms with gross receipts of $2500 to $5000 per year [*11*]. For the eight farm size classes considered, energy costs per dollar of gross receipts per acre and per unit of production expenses were consistently higher for the smaller of any classes of farms compared.

These data may underestimate the energy inefficiency of small farms because they do not include all energy used for nonbusiness purposes. A population dispersed on many small farms requires greater transportation energy for school buses and for shopping and other trips to town than does a small population on larger farms. In the unlikely event that energy supplies become so short that on-farm energy production is economically feasible, large farms would have an advantage because of size economies in alcohol or methane production from crop residues, manure, grain, or other stocks.

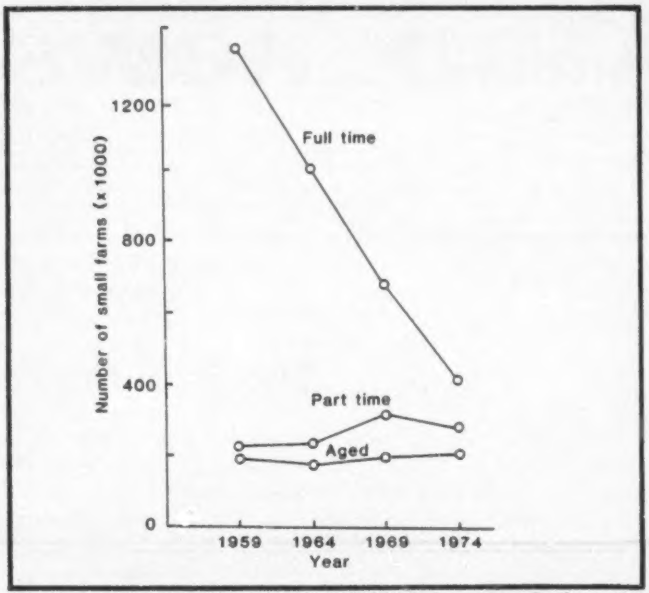


Fig. 1. The number of small farms in the United States by category for the census years 1959 to 1974 [*6*].

In short, small farms are less energy efficient than large farms and higher energy prices are unlikely to improve the competitive position of the small farm.

Small farms offer an alternative to the trauma of outmigration of farm people to cities. This issue has two components. One is whether small farms offer an alternative to outmigration and the second is whether outmigration has been traumatic.

The great farm-urban exodus is over and comparatively few established farmers leave farming except for retirement in town. As indicated earlier, small farms are growing in numbers primarily because town and city workers choose to reside on the farm. These people do so despite the recognized lower economic efficiency (to be discussed later) of small farms because people are willing to use their nonfarm income to pay for consuming the farm way of life, because tax benefits accrue from having a farm business, and because rural services are subsidized by taxpayers.

Charging residents the full cost of now subsidized water, electrical, telephone, mail, and school bus services would slow urban sprawl, promote orderly development, and reduce the need for land-use planning and zoning. Fewer part-time small farms entering agriculture would leave more land for expansion of established farms into economic size units.

The second component of this issue is whether rural people became worse off when they moved to the city. It is well recognized that the heaviest migration from farms was by youth who were never farm operators and who had fewer problems adjusting to a new environment than did families who formerly were established farmers.

A review of studies of rural-urban migrants, most of whom were formerly established on farms, revealed that all studies were in agreement that objective measures indicated a better life off the farm [*12*]:

> Migrants substantially increased their real income and national income. Farmers who remained at home also received higher incomes because

(Continued on page 3)

(Continued from page 2)

they could farm larger units and did not have to share the home farm operation with others. Available data also show that migrants in vast majority improved their housing and medical and welfare service opportunities, as well as educational opportunities for their children. Very few became part of the urban unrest problem.

Subjective measures such as the migrants' perceptions of whether they were better off for leaving the farm also supported the conclusion that the exodus improved quality of life.

Middle-class migrants quickly adapted to urban middle-class culture, but adjustments were often difficult for the lower class. Especially for the latter, inadequate human investment in the form of job information, training, and general schooling created undue friction in the great farm-urban exodus. But given the choice between staying with the poverty, discrimination, underemployment, and squalor left behind and a move with inadequate preparation, the exodus was more attractive to the disadvantaged and disenfranchised.

Redirection of publicly supported agricultural research and extension can save the small farm and redistribute benefits from the rich to the poor. An estimated 85 percent of publicly supported agricultural production research was scale-neutral in 1979 [*13*]. Of the 15 percent of the public agricultural production research that was scale-related, 7 percentage points were directed to farms under $20,000 gross sales, 5 percentage points were directed to moderate size farms, and 3 percentage points were directed to large farms with over $100,000 in gross sales. The payoff from agricultural production research and extension (R & E) has been exceedingly high, typically averaging a 50 to 100 percent rate of return on investment. This return is achieved by savings in conventional inputs such as land and irrigation water, by lower food and fiber costs to consumers, and by foreign exchange earnings through exports.

Farmers who adopt the results of R & E early benefit from it but the competitive farming industry on the whole is unable to retain the benefits. Farm productivity gains averaged 1.7 percent per year from 1970 to 1978, saving consumers over $2 billion annually in food costs. If productivity gains were solely on small farms, productivity advances as measured by output per unit of conventional inputs on farms with under $20,000 in sales would need to average at least 20 percent annually or, on farms with sales of $40,000 or less, would need to average 9 percent annually to produce benefits comparable to current benefits. Such productivity gains are unattainably and absurdly high even if R & E could somehow be confined only to small farms.

Because publicly supported R & E is mainly related to biological sciences and output-increasing, its impact on farm structure is modest, serving mainly to fill the growing demand for food without increasing conventional production inputs. This contrasts with private machinery firms which emphasize labor-saving technology such as the tractor and its complements. Private investment would continue to expand farm size and diminish farm numbers even if public R & E were terminated for large farms. But output-increasing R & E from the land grant university system would no longer produce benefits that lower real spending for food, expand exports to earn foreign exchange, and save soil.

Data for 1974 show that public agricultural research alone supplied $12.37 in benefits for each tax dollar provided for such research by U.S. families with incomes of under $5000 and $1.20 of benefits per tax dollar provided for such research by families with incomes of over $20,000 [*14*]. Thus taxes to support R & E have redistributed income from the rich to the poor.

Research and extension is not an effective tool to redistribute income to small farms. Part-time farmers, now the modal small-farm category, are often distracted from improving farm productivity by lack of time, scale, or need for additional income; aged farmers have short earnings horizons which detract from their commitment to make needed investments in greater productivity. Full-time, able-bodied small farm operators often have limited human and material resources to raise output and income substantially from R & E. I am by no means contending that R & E should not be for small farmers but rather that agricultural R & E has the highest payoff to society by emphasizing scale-neutral practices and technology made available to all farms, including of course the largest 300,000 farms which account for nearly three-fourths of farm output. In short, public R & E is for consumers, and if it is to benefit consumers it must work through the mid-size and large farms that account for 83 percent of farm output as well as through small farms.

Federal government programs have hastened the demise of small farms. Of the major federal government programs, only three categories are considered here—credit, commodity supports, and aggregate demand expansion.

The Farmers Home Administration, the major federal credit agency for farmers, provided 22 percent of its farm loan volume to farms with sales of under $40,000 in 1979 [*15*]. These farms accounted for 12.3 percent of all sales of farm commodities in the same year, hence lending was much more concentrated on small farms than on large farms as measured by farm receipts. Loan subsidies were even more concentrated than loans on small farms because interest rates were lower for small than for large farms.

Government commodity price and income support payment benefits average much more per large farm than per small farm. But overall income benefits are larger per dollar of output on small farms than on large farms. Economies of size may be measured by a unit cost curve (by size of farm) defined as all costs (including opportunity costs of operator family labor, management, and equity capital) divided by gross farm income from receipts and government payments. By this measure, commodity programs flatten the unit cost curve, reduce economies of size, and diminish incentives for expansion.

On the other hand, government programs provide price security and payments that enable a given net worth to be leveraged further than under a free market to purchase a larger farming unit. The two effects tend to offset each other. This is one reason why the most comprehensive analysis to date of the impact of commodity programs on farm structure concluded that "On net, the mass of data, evidence and professional judgments provide little basis for any conclusion other than that government price and income payment policy has generally been neutral in its effect on farms of varying sizes producing program commodities" [*16*].

Government monetary-fiscal policies to stimulate aggregate demand and promote full employment have been a major source of inflation. Inflation has created severe cash-flow problems for farmers and raised barriers to entry into farming but has not significantly influenced growth rates in net worth of established farms [*17*]. Because small farmers receive most of their income from off-farm sources, they have been less restrained by farm cash-flow problems than other farmers. Mid-size family farms have been most disadvantaged by cash-flow problems stemming from inflation because they have less off-farm income than small farms and less access to debt and equity capital than large farms. This is one reason why numbers of mid-size family farms have declined while numbers of small farms have increased in recent years.

In summary, the empirical evidence provides no support for the proposition that the three major government programs or policies considered above have hastened the demise of small farms. The two principal forces requiring farms to grow larger are labor-saving

(Continued on page 4)

(Continued from page 3)

technology and growth in labor income. Regarding the latter, with given prices and technology, farms must grow in scale for their operators to keep abreast with growth of personal income in other sectors.

The social and economic vitality of rural towns and small cities is drained by farm enlargement and consolidation. Dating at least from the famous Goldschmidt study of Arvin and Dinuba, California, in the early 1940's, the socioeconomic relation of the rural town or small city to its surrounding farming area has been of interest. Those who inferred that results for Dinuba showed that community vitality was favored by small farms failed to realize that Dinuba was a town surrounded by family-size farms (slightly larger than average size) and not by small farms [*18*]. Many towns in the South are surrounded by small, low-income farms. These communities frequently display lack of economic and social vitality and are hardly models to be emulated. Given the importance of income and employment to well-being, the socially optimal size of a farm from the standpoint of the community is not a small low-income farm.

Much of the decline in rural nonfarm population attributed to the decline in farm population would have occurred in the absence of farm consolidation and enlargement. The principal reason for the decline of the small town is the improvement of transportation—automobiles and roads. The impact not only influenced the local general store but also schools and medical facilities, because people could afford to travel greater distances to obtain a higher quality and variety of services.

(Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade, transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes--see Table 5, page 5.

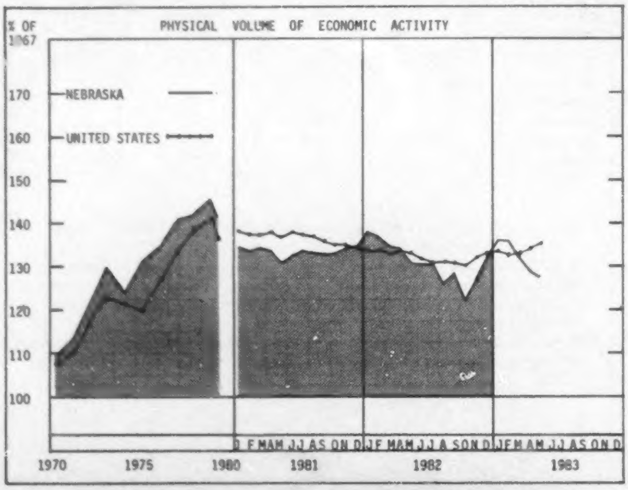
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

May, 1983	Current Month as Percent of Same Month Previous Year		1983 Year to Date as Percent of 1982 Year to Date	
Indicator	**Nebraska**	**U.S.**	**Nebraska**	**U.S.**
Dollar Volume	100.5	104.5	101.4	103.1
Agricultural	78.0	96.0	97.0	99.0
Nonagricultural	103.9	104.7	102.1	103.3
Construction	130.9	109.6	100.8	108.6
Manufacturing	96.2	97.5	88.3	93.9
Distributive	103.8	106.9	105.0	106.2
Government	108.3	106.7	107.9	105.9
Physical Volume	97.2	100.9	97.9	99.7
Agricultural	80.4	97.1	97.4	99.7
Nonagricultural	99.8	101.1	97.9	99.7
Construction	127.4	106.6	99.3	107.1
Manufacturing	95.1	96.6	87.2	93.3
Distributive	100.4	103.3	101.3	102.5
Government	99.5	99.3	99.4	99.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	**U.S.**
Dollar Volume	357.9	379.0
Agricultural	273.9	321.9
Nonagricultural	370.4	380.9
Construction	251.6	336.9
Manufacturing	316.7	285.9
Distributive	398.2	435.1
Government	390.4	392.4
Physical Volume	127.6	135.1
Agricultural	109.1	131.4
Nonagricultural	130.3	135.2
Construction	74.7	100.0
Manufacturing	131.2	116.0
Distributive	134.0	146.5
Government	141.4	146.6

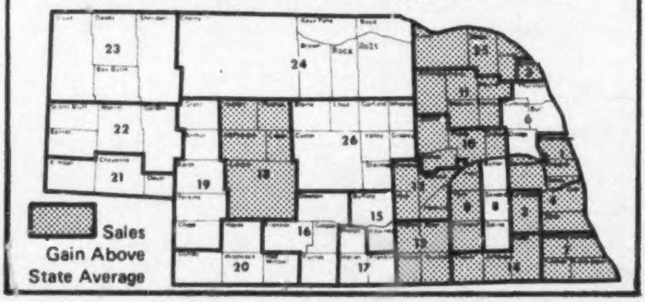


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

Region Number and City	City Sales*	Sales in Region*	
	May 1983 as percent of May 1982	**May 1983 as percent of May 1982**	**Year to date '83 as percent of Year to date '82**
The State	103.9	107.3	101.0
1 Omaha	104.3	108.3	104.2
Bellevue	115.7		
Blair	106.3		
2 Lincoln	110.9	112.9	105.9
3 So. Sioux City	100.0	109.1	104.5
4 Nebraska City	103.8	113.9	104.1
6 Fremont	109.3	112.6	102.9
West Point	123.2		
7 Falls City	108.1	107.2	100.8
8 Seward	115.6	115.1	104.0
9 York	104.8	106.9	102.5
10 Columbus	115.3	117.2	105.0
11 Norfolk	111.8	115.6	105.0
Wayne	123.2		
12 Grand Island	104.5	109.4	104.9
13 Hastings	100.9	106.4	103.5
14 Beatrice	110.9	116.3	106.3
Fairbury	132.3		
15 Kearney	109.8	110.3	102.8
16 Lexington	106.7	111.0	99.8
17 Holdrege	112.6	113.9	100.2
18 North Platte	107.1	113.6	107.4
19 Ogallala	107.0	110.4	99.4
20 McCook	111.7	115.5	103.1
21 Sidney	97.3	99.0	91.2
Kimball	97.0		
22 Scottsbluff/ Gering	102.6	105.3	97.5
23 Alliance	111.5	110.6	101.5
Chadron	116.3		
24 O'Neill	111.8	105.1	96.5
25 Hartington	120.8	115.6	103.3
26 Broken Bow	110.6	114.9	103.0

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Regional totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1983 YEAR TO DATE AS PERCENT OF 1982 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(Continued from page 4)

Rural communities have shown remarkable vitality in the face of declining farm employment. Since 1970, employment and population have grown more rapidly in rural communities than in metropolitan communities. The well-documented demographic transition is characterized by employment and population growth not only in counties adjacent to metropolitan counties but also in hinterland counties. Mostly because of the dispersal of nonfarm industry to rural communities, the probability of towns of 1000 inhabitants growing was as great as the probability of larger towns and cities growing even in the 1960's [*19*].

Preservation of small farms is essential to preserve competition and avoid concentration of production on a few large farms. Small farms with sales under $40,000 in 1981 accounted for 72 percent of all farms but for only 12.6 percent of all farm receipts. The remaining 694,000 farms of larger size alone constitute a highly competitive market.

For selected commodities, concentration is much greater than for the farming industry as a whole. The most concentrated major component of animal agriculture is broiler chicken production and processing. An estimated 97 percent of all broilers are produced under vertical coordination—90 percent under production contracts and 7 percent directly by integrated broiler processing firms [*20*]. In 1975, 30 percent of broilers were processed by the eight largest firms and 50 percent by the 11 largest firms. Through production contracts with growers or company-owned growing operations, these firms could effectively control broiler production for their processing facilities. Despite or because of this high degree of concentration, broiler production efficiency has increased more rapidly than efficiency in beef and pork production and the cost savings have been reflected quite fully in wholesale broiler prices.

My intent is not to make a case for concentration of production among fewer firms, but to indicate that agricultural production in the foreseeable future is in no danger of being concentrated in so few firms that monopoly pricing or reduced efficiency will be a problem. Furthermore, small farms contribute too little to aggregate production to be an effective source of market competition.

Is the Optimal Farm a Small Farm?

A large number of studies of economies of size indicate that small farms produce less efficiently than large farms but most production economies are realized by farms with sales of approximately $60,000 per year [*21*]. Modest market economies in the form of input price discounts and product price premiums continue to accrue to sales of $100,000 and more. The optimal size of a farm varies a great deal by individual (or family) and commodity.

The optimal size of farm depends not only on production and market economies but also on the marginal utility of resources and income. As farm size expands to approximately $100,000 of sales (a size normally providing a labor-management return to the full-

(Continued on page 6)

5. PRICE INDEXES

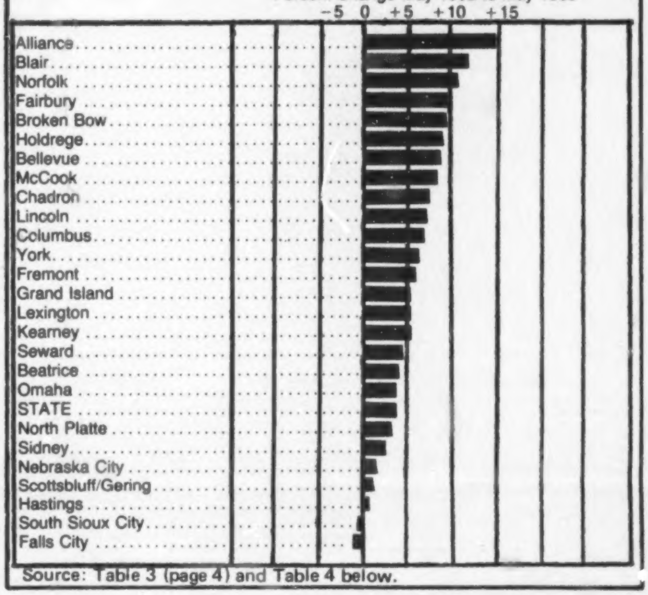
May, 1983	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	297.1	103.5	103.7
Commodity component	270.9	103.6	103.3
Wholesale Prices	301.7	101.0	100.8
Agricultural Prices			
United States	245.0	98.8	99.3
Nebraska	251.0	96.9	99.6

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEX

Percent Change May 1982 to May 1983



Source: Table 3 (page 4) and Table 4 below.

4. MAY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	105.6	140.6	102.1
Alliance	106.9	561.1	107.6
Beatrice	106.8	70.3	80.8
Bellevue	104.8	156.2	111.7
Blair	109.9	371.9	117.0
Broken Bow	110.7	150.5	126.3
Chadron	105.7	94.3	116.8
Columbus	106.1	91.3	98.5
Fairbury	104.0	44.1	106.8
Falls City	106.7	30.1	98.2
Fremont	107.2	107.8	88.7*
Grand Island	106.9	141.7	136.5
Hastings	101.7	117.3	102.2
Holdrege	110.5	125.9	96.7
Kearney	108.2	77.3	104.0
Lexington	107.9	106.3	75.0
Lincoln	103.2	181.5	97.0
McCook	114.5	86.7	99.2
Nebraska City	106.7	65.7	104.9
Norfolk	104.6	299.3	111.6
North Platte	96.9	198.9	79.0
Omaha	104.6	148.9	105.5
Scottsbluff/Gering	107.5	65.0	87.5
Seward	107.3	46.5	116.5
Sidney	109.9	122.0	85.1
So. Sioux City	102.4	104.9	118.3
York	109.7	165.5	102.4

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(Continued from page 5)

time operator near the median income of nonfarm families), economic efficiencies are obtained which are passed on to consumers to increase their utility. As farm size expands further efficiencies are minor but, given declining marginal utility of income, total utility from farm income declines [*22*]. Relying on a system of smaller farms would not reduce utility of the farm population from the optimal level of $100,000 of sales per farm if farm people continue to have off-farm jobs to bring income of smaller farms on the average to that of optimal size farms—as apparent in farm income statistics. But consumers would experience substantial loss of utility because of lower farming efficiency and attendant higher cost of food.

Numerous studies of farm-community interactions reveal that moderate size farms are most closely consistent with the well-being of rural communities. Middle-class families support churches, schools, clubs, and commercial businesses. Although the optimal size of a farm, if there is one, varies widely and no one size fits all conditions, the size of farm consistent with increased well-being of society as best measured with our crude tools is neither a small nor a very large farm but rather is a moderate-size family operation.

In short, the optimal size of farm to increase well-being as best that can be measured appears to be the typical-size commercial farm of today—approximately $100,000 in sales and $1 million in production assets. The nation could currently support approximately 1.2 million such farms, or twice the existing number of family-size farms [*23*]. All persons do not possess the human resources to be family farmers; some must begin as hired laborers, renters, and part-time owners. There is much value in a heterogeneous farming economy that keeps options and opportunities open to the working class as individuals and society strive to improve human and material resources.

Conclusions

The evidence provides no basis to accept any of the eight small farm hypotheses tested in this article. Valid reasons may exist to maintain and even encourage small farms, but they are not the reasons commonly given and embodied in the eight tested hypotheses.

LUTHER TWEETEN*

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Business in Nebraska

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PERSONAL INCOME 1969-1983: NEBRASKA AND THE UNITED STATES

Nebraska's personal income is extremely volatile, compared with the United States'. As Chart 1 and Table 1 clearly demonstrate, Nebraska's personal income rises more rapidly during good periods and declines faster during periods of contracting economic activity than United States' personal income.

This issue of *Business in Nebraska* reviews, analyzes, and compares Nebraska's personal income with that for the United States. Data are available from 1969 through the first quarter of 1983. This analysis focuses upon personal income, whose major components include wages and salaries; dividends, interest, and rents; and transfer payments. A review of the concepts involved is helpful before presenting the analysis.

DEFINITIONS

The personal income (PI) of an area is defined by the Bureau of Economic Analysis, U. S. Department of Commerce, as income received by, or on behalf of, the residents of an area. It is comprised of income received from all sources, including active participation in production; from transfer payments from the public sector and private sources; and public interest payments which are treated as transfer payments. PI includes the incomes of individuals; nonprofit institutions; private, noninsured welfare funds; and private trust funds. Proprietors' income is treated as income received by individuals and is also part of PI.

HISTORICAL OVERVIEW
1969-1983

For perspective, a brief review of changes in Nebraska's and the United States' personal income is provided before cyclical variations are examined. Nebraska's personal income increased from $5.0 billion in 1969 to $17.1 billion in the first quarter of 1983, an increase of 242.0 percent (Table 1). Compared with the nation, Nebraska's gain over this interval was below the 265.0 percent recorded for the United States. Nationally, personal income increased from $723 billion to $2,640 billion over this interval (Table 1). Adjusted for inflation, Nebraska's real PI increased 26.0 percent and the United States' 37.0 percent over the interval 1969-1983, a significant imbalance. Unless specifically stated, personal income data in this study are unadjusted for price changes.

With few exceptions, Nebraska's personal income increased quarter-after-quarter, interrupted only by the recession of 1973-1975; weak grain prices in 1976; and the 1980-1982 recession. A pause in Nebraska's personal income growth was recorded in 1976 when growth slowed to 3.4 percent in the second quarter, declined slightly in the third quarter, and increased again during the fourth quarter of 1976. Nationally, there was a slowdown in personal income growth in 1976, but it was relatively insignificant.

CYCLICAL VARIATION

An examination of the data in Table 1 and Chart 1 reveals that Nebraska's personal income is subject to far more variation than that for the United States. To reiterate a point noted above, when prosperity develops, Nebraska's personal income expands more rapidly than the nation's; however, when the less desirable times occur, Nebraska's income drops more rapidly than the nation's.

The behavior of Nebraska's personal income during the contraction associated with the 1973-1975 recession and the subsequent recovery illustrates personal income's ability to expand and contract rapidly. The rate of increase in Nebraska's personal income peaked in the third quarter of 1973 at 21.4 percent (annualized rate not adjusted for inflation). Note that all annualized rates were calculated by comparing a particular quarter with the year previous quarter. That is, the third quarter of 1973 is compared with the third quarter of 1972, and the fourth quarter of 1973 is compared with the fourth quarter of 1972, and so on. Percentage change figures in Table 1 are annual changes calculated for each quarter.

The trough of the recession, as measured by the rate of change in personal income, occurred during the fourth quarter of 1974, when PI declined 1 percent. The effects of the 1973-1975 recession are illustrated by the quarterly changes in Nebraska's PI. PI expanded 18.1 percent in the first quarter of 1973; 18.4 percent 1973:2 (note that 1973:2 indicates the year, followed by the quarter); 21.4 percent 1973:3; and 19.7 percent 1973:4. The rate of increase dropped to 6.4 percent in the first quarter of 1974; 2.9 percent 1974:2; 0.8 percent in 1974:3; and declined -1.1 percent in 1974:4. Recovery was swift in 1975, with PI increasing 7.9 percent 1975:1; 13.6 percent 1975:2; 15.6 percent 1975:3; and 12.7 percent 1975:4.

Interestingly enough, PI growth peaked both in Nebraska and in the nation during the third quarter of 1973. Nationally, personal income was expanding 12.7 percent at the top of the cycle, compared to 21.4 percent for Nebraska. The trough of the national recession, as measured by personal income expansion, oc-

(Continued on page 3)

Table 1

NEBRASKA AND UNITED STATES QUARTERLY PERSONAL INCOME: 1969-1983

NEBRASKA

Year	Personal Income (billions of $)	Percentage Change from Previous Year
1969	5.0	—
	5.2	—
	5.3	—
	5.4	—
1970	5.5	8.8
	5.6	7.4
	5.6	5.2
	5.7	3.[illegible]
1971	5.8	5.8
	5.9	6.4
	6.0	7.1
	6.2	9.1
1972	6.5	12.4
	6.7	13.0
	6.8	13.4
	7.1	15.5
1973	7.7	18.1
	7.9	18.4
	8.3	21.4
	8.5	19.7
1974	8.2	6.4
	8.1	2.9
	8.3	0.8
	8.4	-1.1
1975	8.8	7.9
	9.3	13.6
	9.6	15.6
	9.5	12.7
1976	9.5	7.9
	9.6	3.4
	9.6	-0.6
	9.8	2.8
1977	10.1	6.3
	10.2	6.8
	10.5	10.1
	11.0	12.8
1978	11.1	9.6
	11.7	14.3
	11.9	12.7
	12.7	15.3
1979	12.8	15.4
	13.6	16.0
	13.7	15.6
	13.9	9.1
1980	13.7	6.9
	13.7	1.4
	14.2	3.4
	14.6	5.2
1981	15.8	15.2
	16.1	17.2
	16.7	17.4
	16.8	14.9
1982	16.3	3.0
	16.5	2.5
	16.7	0.3
	17.0	1.3
1983	17.1	5.1

UNITED STATES

Year	Personal Income (billions of $)	Percentage Change from Previous Year
1969	723	—
	740	—
	757	—
	770	—
1970	781	8.0
	803	8.5
	812	7.3
	820	6.5
1971	838	7.3
	857	6.8
	868	6.9
	884	7.8
1972	913	9.0
	928	8.2
	951	9.5
	988	11.8
1973	1018	11.5
	1044	12.5
	1072	12.7
	1102	11.5
1974	1118	9.9
	1149	10.1
	1181	10.2
	1200	8.9
1975	1208	8.0
	1241	8.0
	1277	8.2
	1308	9.0
1976	1342	11.1
	1368	10.2
	1398	9.5
	1432	9.5
1977	1471	9.6
	1509	10.3
	1555	11.2
	1603	11.9
1978	1639	11.4
	1697	12.4
	1756	12.9
	1815	13.2
1979	1865	13.8
	1909	12.5
	1974	12.4
	2027	11.7
1980	2080	11.5
	2103	10.2
	2179	10.4
	2252	11.1
1981	2322	11.6
	2372	12.8
	2449	12.4
	2484	10.3
1982	2500	7.7
	2542	7.2
	2582	5.4
	2616	5.3
1983	2640	5.6

(Continued from page 1)

curred sometime between the fourth quarter of 1974 and the second quarter of 1975 (Table 1). The fourth quarter of 1974 marked the bottom of PI growth in Nebraska.

A similar relationship between Nebraska and the United States, relative to changes in personal income, is exhibited in the 1980-1982 recession. That is, Nebraska's changes--either up or down--were more violent than the nation's. Rather erratic movements in Nebraska's personal income rate of change were evident in 1980, as quarterly rates would increase--then decrease. The rate of increase in Nebraska's 1980 personal income was below the nation's by several percentage points for each quarter. Nebraska personal income began to expand rapidly during 1981's first quarter, when it increased 15.2 percent--well above that recorded for the nation. Personal income growth in Nebraska peaked in the third quarter of 1981 at 17.4 percent, compared with 12.4 percent nationally. The peak in the nation's income growth had occurred one quarter earlier, at 12.8 percent.

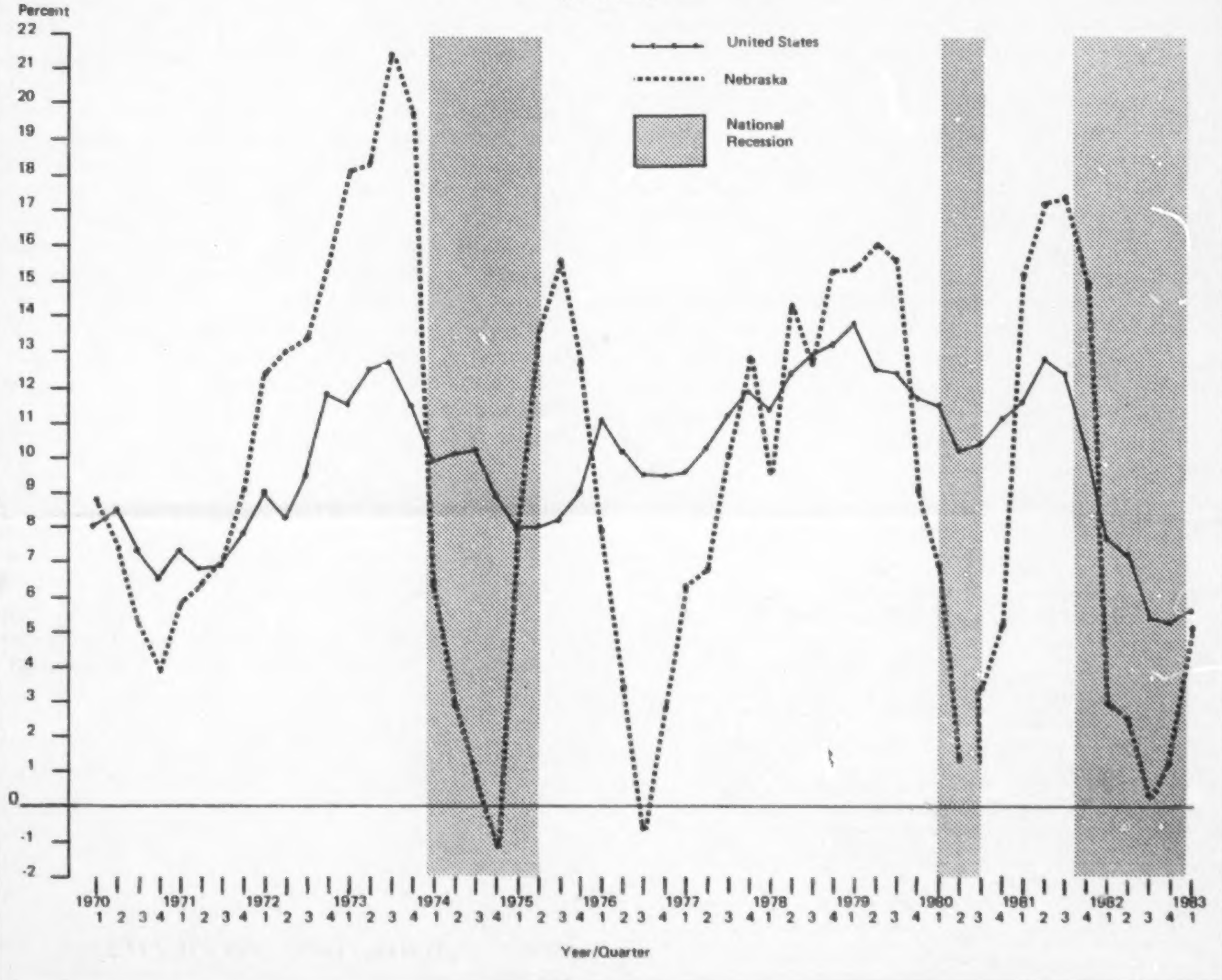
The collapse of personal income growth was especially harsh during the 1981-1982 recession. Nebraska's PI was expanding at an annual rate of 17+ percent during 1981's second and third quarters. Growth slowed to 14.9 percent during 1981's fourth quarter and dropped severely to 3.0 percent during 1982's first quarter. Eventually, the rate of increase declined to 0.3 percent in 1982 before beginning a gradual recovery (Table 1). This unusual drop in personal income growth had a marked impact upon state tax collections.

Once again, Nebraska and the nation were nearly coincident, in terms of income growth, as the cycle reversed from contraction to expansion. Nationally, the first increase in the personal income growth rate, following several quarters of decline, occurred during 1983's first quarter when personal income climbed 5.6 percent.

(Continued on page 6)

Chart 1

ANNUAL RATE OF INCREASE (DECREASE):
NEBRASKA AND UNITED STATES PERSONAL INCOME
(1969-1983)



Review and Outlook

Output from Nebraskå's economy improved slightly in June, according to the Bureau of Business Research's net physical volume index. The gain, however, was uneven, as some sectors scored substantial gains, whereas others recorded modest declines. Overall, the Nebraska economy recorded a 2.4 percent rise on a month-to-month basis.

The agricultural sector recorded a substantial gain of 22.1 percent May-June 1983. Nebraska cash farm marketings, on a seasonally-adjusted basis, were $599 million--up 31.8 percent from the previous month but down slightly when compared with June 1982. Prices received by Nebraska farmers and ranchers in June 1983 did not compare as well as with the previous month. On a month-to-month basis, prices received were down 4.4 percent in Nebraska, whereas, on an annual basis, prices were down 5.5 percent. Nationally, agricultural prices received were slightly more favorable for producers, with the year-to-year change being a decline of 3.2 percent--slightly better than the 5.5 percent decline received by the Nebraska farmers.

The increase in the agricultural component of the state's economy overshadowed the nonagricultural sector, which recorded a slight decline of 0.3 percent. The Nebraska economy's construction and distributive trade sectors recorded slight gains, whereas manufacturing and the government sectors posted declines in output.

The construction component of (Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

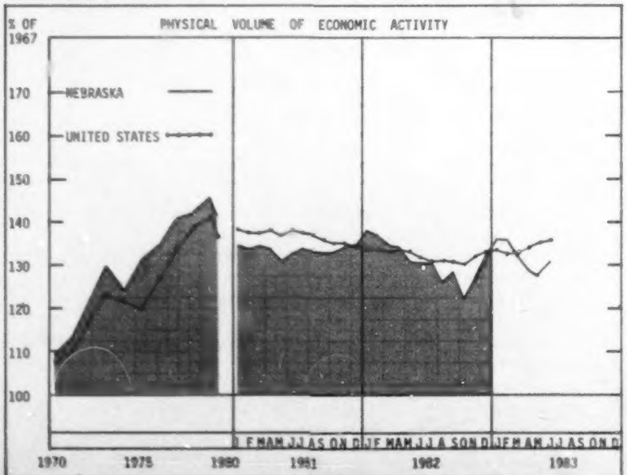
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

JUNE 1983	Current Month as Percent of Same Month Previous Year		1983 Year to Date as Percent of 1982 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	102.2	105.9	101.5	104.2
Agricultural	87.9	105.4	95.5	99.8
Nonagricultural	104.5	105.9	102.5	104.3
Construction	134.0	111.3	106.1	109.0
Manufacturing	97.4	98.2	89.7	94.6
Distributive	104.3	108.5	104.8	107.4
Government	107.7	106.6	107.8	107.0
Physical Volume	99.6	102.6	98.1	100.6
Agricultural	93.1	108.9	96.8	101.0
Nonagricultural	100.7	102.4	98.4	100.5
Construction	130.4	108.3	104.3	107.3
Manufacturing	96.6	97.2	88.6	93.9
Distributive	101.2	105.4	101.3	103.7
Government	98.7	98.7	99.3	99.1

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	364.8	384.6
Agricultural	322.8	341.0
Nonagricultural	371.0	386.0
Construction	264.3	345.8
Manufacturing	311.3	286.4
Distributive	400.6	442.5
Government	387.0	397.9
Physical Volume	130.3	136.0
Agricultural	134.5	141.5
Nonagricultural	129.6	135.9
Construction	78.4	102.6
Manufacturing	128.7	115.7
Distributive	133.8	147.9
Government	139.5	145.4



3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

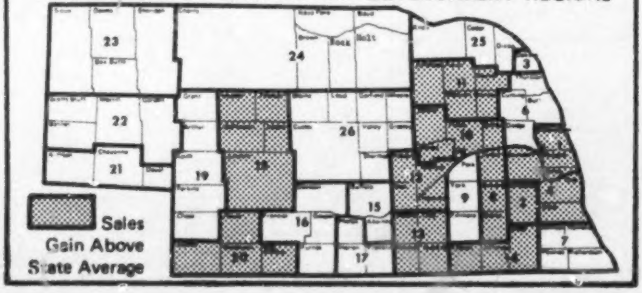
Region Number[1] and City	City Sales[2]	Sales in Region[2]	
	June 1983 as percent of June 1982	June 1983 as percent of June 1982	Year-to-date 83 as percent of year-to-date 82
The State	106.9	109.0	102.5
1 Omaha	108.8	110.5	105.3
Bellevue	109.2		
Blair	98.0		
2 Lincoln	109.2	111.2	106.9
3 So. Sioux City	92.3	98.3	103.4
4 Nebraska City	108.0	110.4	105.2
6 Fremont	104.6	105.2	103.3
West Point	104.5		
7 Falls City	114.3	110.8	102.6
8 Seward	106.4	112.1	105.4
9 York	104.3	106.3	103.2
10 Columbus	108.3	109.0	105.7
11 Norfolk	103.3	108.3	105.6
Wayne	114,2		
12 Grand Island	101.9	107.0	105.3
13 Hastings	108.1	110.7	104.8
14 Beatrice	109.6	112.1	107.3
Fairbury	117.4		
15 Kearney	105.5	104.5	103.1
16 Lexington	109.2	109.5	101.6
17 Holdrege	98.3	99.4	100.1
18 North Platte	102.8	104.3	106.8
19 Ogallala	98.5	103.3	100.1
20 McCook	111.0	113.2	104.9
21 Sidney	101.9	111.1	94.7
Kimball	119.4		
22 Scottsbluff/Gering	105.6	109.7	99.7
23 Alliance	110.1	110.8	103.3
Chadron	106.4		
24 O'Neill	106,6	99.3	97.0
25 Hartington	108.4	105.5	103.7
26 Broken Bow	102.5	105.7	103.5

[1] See region map below.

[2] Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales; city totals exclude motor vehicle sales.

Compiled from data provided by Nebraska Department of Revenue.

1983 YEAR TO DATE AS PERCENT OF 1982 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(Continued from page 4)

the Bureau of Business Research's net physical volume index increased 5.1 percent on a month-to-month basis. Despite this gain, activity in the construction sector remains well below previous years.

Output from Nebraska's distributive trade sector increased 0.2 percent on a month-to-month basis. Like the construction sector, activity remains below 1981 and 1982 levels. Although June was an up month for the distributive trade sector, 1983's second quarter was below 1983's first quarter.

Nebraska's manufacturing output recorded a decline of 1.7 percent on a month-to-month basis. The index is above its first quarter recession lows but remains well behind one- and two-year previous levels. The decline follows three consecutive monthly increases in manufacturing activity. For comparison, the manufacturing net physical product index was 128.7 (1967=100) in June 1983; 133.2 in June 1982; and 163.3 in June 1981.

The Nebraska economy's government sector recorded a slight decrease in June 1983, when compared with the previous month. The index stood at 139.5 (1967=100), compared with a reading of 141.3 in June 1982 and a reading of 145.0 in June 1981.

Nebraska's retail sales were strong in June. Total retail sales were up 9.0 percent on a dollar volume basis--6.4 percent on a price-adjusted basis. This represents one of the best monthly gains in retail sales for some time. Perhaps Nebraska's economy has left the 1981-1983 recession behind.

The retail sales gain was led by motor vehicles, for which dollar volume sales (unadjusted for price changes) increased 28.1 percent on a year-to-year basis. Motor vehicle sales in June 1983 amounted to $101 million, compared with $79 million in June 1982.

Nonmotor vehicle sales were up 6.9 percent on a dollar volume basis--4.3 percent when adjusted for price changes. Nonmotor vehicle sales totaled $764 million in June 1983, compared with $715 million in June 1982.

The improvement in the state's retail sales picture was reflected in the city business indexes of several Nebraska cities. Alliance led with a 13.2 percent increase in its city business index. McCook, Blair, Lexington, Broken Bow, Bellevue, Chadron, Omaha, York, Norfolk, and Lincoln all recorded increases, in their respective city business indexes, above the state average gain. City business indexes indicate strength in the state's economy in eastern Nebraska and western Nebraska communities, such as Alliance and McCook.

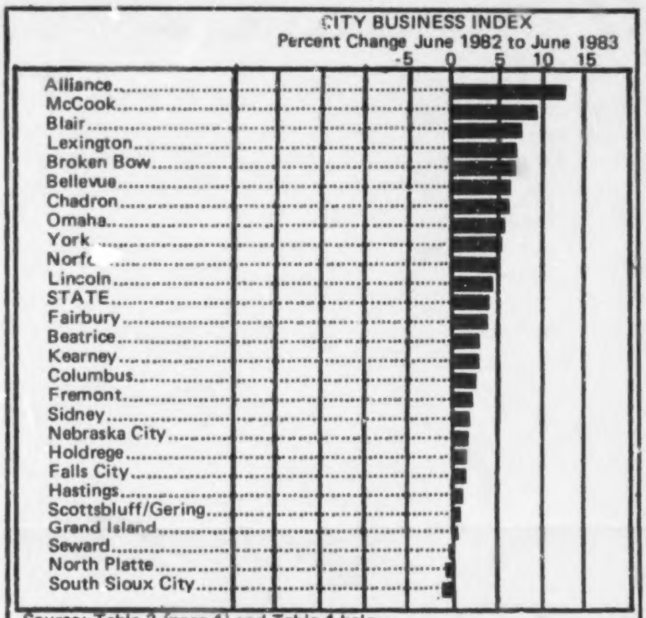
Unit retail sales have been aided by a decline in the rate of inflation. Price increases, as measured by the commodity component of the Consumer Price Index, was up a modest 2.5 percent in June 1983, compared with one year ago.

D. E. P.

5. PRICE INDEXES

JUNE 1983	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	299.3	103.0	103.5
Commodity component	271.6	102.5	103.2
Wholesale Prices	302.5	101.1	100.9
Agricultural Prices			
United States	241.0	96.8	98.9
Nebraska	240.0	94.5	98.7

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.


CITY BUSINESS INDEX
Percent Change June 1982 to June 1983

Source: Table 3 (page 4) and Table 4 below.

4. JUNE 1983 CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	101.7	140.8	107.8
Alliance	103.5	563.6	110.8
Beatrice	102.8	88.0	142.5
Bellevue	101.8	164.9	128.4
Blair	105.6	380.4	140.6
Broken Bow	107.1	191.9	95.0
Chadron	99.5	259.2	121.6
Columbus	102.4	95.7	128.6
Fairbury	101.7	54.4	95.1
Falls City	102.4	42.3	92.9
Fremont	104.5	100.5	78.6*
Grand Island	103.2	92.6	111.7
Hastings	97.9	98.9	78.0
Holdrege	107.2	116.8	99.7
Kearney	104.7	105.0	109.3
Lexington	104.8	138.1	89.5
Lincoln	97.1	182.3	102.9
McCook	110.6	124.5	112.8
Nebraska City	103.5	72.4	118.3
Norfolk	102.1	207.7	125.2
North Platte	92.6	151.9	104.1
Omaha	101.6	150.9	108.7
Scottsbluff/Gering	102.5	74.2	102.0
Seward	103.7	47.0	106.7
Sidney	105.9	106.9	104.2
So. Sioux City	99.6	197.2	114.6
York	105.4	157.6	107.1

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(Continued from page 3)

Nebraska's income growth picked up in the fourth quarter of 1982, one quarter before the United States'.

IMPLICATIONS

There are numerous possible explanations for this difference in personal income growth rates, a few of which will be explored here. A major reason is difference in size. Nebraska's economy is very small, compared to the United States'. Adjustments occurring *nationally* that affect industries concentrated in Nebraska will have a more substantial impact upon Nebraska. The recent adjustments in meatpacking is the type of problem which affects Nebraska far more than the nation. In the mid-1970s, development of energy sources to the west of Nebraska led to a boom in the state's transportation sector. The growth of transportation-related jobs was significant in pushing Nebraska's personal income growth rate above the nation's in 1975. Construction expanded in the 1970s because new electric generating capacity was built.

The importance of farm income is another factor behind the greater variation in Nebraska's personal income growth rate. Commodity and livestock prices rose and fell rather dramatically, and decisions to market or hold off on marketing are constantly being examined. Fluctuations in farm marketing, and the ability to speed up or postpone a marketing decision, produce wide swings in Nebraska's farm income. Because farm income is a more influential personal income component in Nebraska than in the nation--approximately 8.0 percent, compared to 2.0 percent--personal income in Nebraska moves over a wider magnitude than nationally. These fluctuations in income are intensified by the secondary effects of farm income changes on agricultural suppliers. Farm supply firms' sales and profits move in conjunction with farm income.

Personal income changes over the 1969-1983 interval underscore three noteworthy points about the Nebraska economy. First, Nebraska's income changes far more rapidly than the nation's. At the top of the cycle, Nebraska's income was expanding at 21.4 percent, compared with 12.7 percent for the nation. At the bottom of the cycle, Nebraska's income was actually contracting 1 percent, compared with 8 or 9 percent growth for the nation. Nebraska's income moved more violently than that for the country as a whole. This is not unexpected since Nebraska's economy is considerably smaller than that of the United States.

A second point which needs to be emphasized is that Nebraska is a coincident state. Other personal income measures suggest that personal income in Nebraska moves up or down nearly simultaneously with the national level. Recessions do not necessarily come any earlier or later in Nebraska than in the United States, nor do they particularly tend to stay any longer or be of briefer duration than that for the nation. Past performance is no guarantee, however, of what the relationship will be in the future.

In the 1970s--once the national recovery was underway--Nebraska's income gains were usually more rapid than the nation's. Consider the quarter-by-quarter changes in 1975, compared with those for the nation. During 1975's first quarter, Nebraska's personal income increased 7.9 percent, compared with 8.0 percent nationally. By the second quarter, Nebraska's personal income was up an astounding 13.6 percent, compared with 8.0 percent for the nation. The third quarter of 1975 resulted in Nebraska's income increasing at a 15.6 percent clip, compared with 8.2 percent for the nation--almost doubling over the national increase in personal income--whereas, during 1975's fourth quarter, Nebraska's personal income was up 12.7 percent on an annual basis, compared with 9.0 percent for the nation. In 1975, special, extenuating circumstances likely existed, which made the gap between Nebraska's and the United States' personal income growth somewhat unusual. These circumstances include relatively good grain and livestock prices; a rapidly expanding transportation sector reflecting a growth in the state's rail transportation payroll, along with other transportation-related increases; and the construction of additional electric generating capacity. Nebraska's economy emerged from the 1973-1975 recession far more swiftly than the national economy, but stumbled in 1976 when the nation continued to expand.

Recovery from the 1981-1982 recession has not followed the pattern of rapid income gains in Nebraska. It is too soon to know whether this is a fundamental change in the relationship between Nebraska and the nation or whether the previous pattern will be re-established.

D. E. P.

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